DOCUMENT RESUME

ED 293 958 UD 026 146

AUTHOR	Plato, Kathleen; And Others
TITLE	A Study of Categorical Program Participation of Chapter 1 Students.
INSTITUTION	Washington Office of the State Superintendent of Public Instruction, Olympia.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	30 Sep 86
CONTRACT	400-86-0027
NOTE	157p.
PUB TYPE	Reports - Evaluative/Feasibility (142) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Academic Achievement; Age Differences; American Indians; Asian Americans; Attendance; Bilingual Students; Black Students; *Compensatory Education; Day Care; Early Experience; Elementary School Students; Elementary Secondary Education; *Federal Programs; Hispanic Americans; Mainstreaming; Mathematics Achievement; Migrant Children; *Minority Group Children; Program Effectiveness; Program Evaluation; Racial Differences; Reading Achievement; School Holding Power; Secondary School Students; Sex Differences; Student Attitudes; Student Behavior; *Student Characteristics; Student Evaluation; *Student Participation; White Students
IDENTIFIERS	*Education Consolidation Improvement Act Chapter 1; *Service Delivery Assessment

ABSTRACT

This study reviews the extent to which students served by Chapter 1 also received services from other categorical programs. In addition, the characteristics and achievement levels of the singly and multiply served students were reviewed. Findings include the following: (1) children served in two programs are usually served in two different subjects; (2) Chapter 1 migrant students are more likely served by more than one program than Chapter 1 regular students; (3) multiply-served students scored lower in reading and mathematics than did singly-served students; (4) there is a dramatic decrease in special program services in grades 8 and 10 even though test scores at those grades show that students do not have a decreased need for such services; (5) students served in categorical programs are older and more likely male than students not served; (6) multiply-served students tend to be older than singly-served students; (7) Hispanics dominate the Chapter 1 migrant population, and Asians dominate the bilingual population; (8) self-reported absentee rates among special program students do not differ from those of the general population; (9) special program students are less likely to have preschool experiences or day care than the general population; (10) evidence of behavioral problems were present in the records of both the singly- and multiply-served child; and (11) students served by one special program appear to be experiencing only moderate academic difficulty; multiple services were reserved for the most seriously troubled students. Data are presented on 66 tables and figures. Appendices present the survey instruments. (BJV)

5-17-88

ED293958

A Study of Categorical Program Participation of Chapter 1 Students

by

Kathleen Plato, Washington OSPI
Dennis Deck, Northwest Regional Educational Laboratory
Gordon Ensign, Washington OSPI
Duncan MacQuarrie, Washington OSPI
Patricia Neill-Carlton, Northwest Regional Educational Laboratory

with assistance from

Alfred Rasp Jr., Washington OSPI
Stephen Murray, Northwest Regional Educational Laboratory
Michael Lafferty, Pasco School District

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

UD026146

September 30, 1986

TABLE OF CONTENTS

The National Assessment of ECIA Chapter 1 1

Section 1: Background Information and State Program and Policy Context 2

1.1 Introduction 2

1.2 Rationale 2

1.3 State Population Description 4

1.4 Categorical Program Participation 5

1.5 State Categorical Program Policies 6

1.6 Representativeness 7

Section 2: The Databases and Factors Affecting Interpretation 8

2.1 Use of Multiple Databases 8

2.2 The Grants Reporting and Program Evaluation System (GRAPES) Files 8

2.3 The Washington State Assessment Program Files 9

2.4 Pasco School District Files 10

2.5 Comparison of Databases 11

Section 3: Data Analysis 13

3.1 Quality Control Checks 13

3.2 Evolution of the Models Used in the Analyses 17

3.3 Data Management 18

Section 4: Presentation of Findings 19

4.1 The Extent of Multiple Program Participation in One State . 19

4.2 The Achievement Profiles of Special Program Populations . . 24

4.3 The Characteristics and Experiences of Special Program Populations . . 54

4.4 Local Patterns of Service Over One Year 86

TABLE OF CONTENTS
(Continued)

Section 5: Summary of Findings 94

Attachment A State GRAPES File Forms for Study 98

Attachment B State Assessment Program Student Questionnaire 102

LIST OF TABLES

Table 1	Washington State Categorical Program Participation 1984-85	5
Table 2	Relationship of Databases to Study Objectives	11
Table 3	Summary of Database Characteristics	12
Table 4	Number of Students Tested October 1985	14
Table 5	Number and Percent of Students in Multiple Programs by Grade	15
Table 6	Number and Percent of Grade 4 Pasco Students Served in Multiple Programs	16
Table 7	Number and Percent of Students by Service Model	17
Table 8	Number and Percent of Students by Compressed Service Model	18
Table 9	Number and Percent of Students Served in Multiple Categorical Programs	19
Table 10	Number and Percent of Districts Serving Students in Multiple Categorical Programs	21
Table 11	NCE Status in Reading Achievement by Service Model	26
Table 12	NCE Status in Math Achievement by Service Model	31
Table 13	Student Perception of Reading Ability	37
Table 14	Student Perception of Math Achievement	42
Table 15	Gender and Age by Service Model	55
Table 16	Racial/Ethnic Group by Service Model	62
Table 17	Preschool Experience by Service Model	67
Table 18	Absenteeism by Service Model	71
Table 19	Learning Resources in the Home by Service Model	75
Table 20	School and Community Activities by Service Model.	80
Table 21	Anticipated Schooling by Service Model	83
Table 22	Number and Percent of Pasco Grade 1-4 Students by Service Model	87
Table 23	Summary of Elementary Case Studies	89
Table 24	Summary of Junior High Case Studies	90

LIST OF FIGURES

Figure 1	Participants Served in a Second Program - Percent of Chapter 1, Migrant or RAP	22
Figure 2	Districts with a Second Program - Percent of Chapter 1, Migrant or RAP	23
Figure 3	Status in Reading by Service Model - Grade 4 Students	28
Figure 4	Status in Reading by Service Model - Grade 8 Students	29
Figure 5	Status in Reading by Service Model - Grade 10 Students	30
Figure 6	Status in Math by Service Model - Grade 4 Students	33
Figure 7	Status in Math by Service Model - Grade 8 Students	34
Figure 8	Status in Math by Service Model - Grade 10 Students	35
Figure 9	Perception of Reading Ability - Grade 4 Students	39
Figure 10	Perception of Reading Ability - Grade 8 Students	40
Figure 11	Perception of Reading Ability - Grade 10 Students	41
Figure 12	Perception of Math Ability - Grade 4 Students	44
Figure 13	Perception of Math Ability - Grade 8 Students	45
Figure 14	Perception of Math Ability - Grade 10 Students	46
Figure 15	Need Help in Reading - Grade 4 Students	48
Figure 16	Need Help in Reading - Grade 8 Students	49
Figure 17	Need Help in Reading - Grade 10 Students	50
Figure 18	Need Help in Math - Grade 4 Students	51
Figure 19	Need Help in Math - Grade 8 Students	52
Figure 20	Need Help in Math - Grade 10 Students	53
Figure 21	Gender by Service Model - Grade 4 Students	56
Figure 22	Gender by Service Model - Grade 8 Students	57
Figure 23	Gender by Service Model - Grade 10 Students	58
Figure 24	Students Older than Expected - Grade 4	59

LIST OF FIGURES
(Continued)

Figure 25	Students Older than Expected - Grade 8	60
Figure 26	Students Older than Expected - Grade 10	61
Figure 27	Racial/Ethnic Group by Service Model - Grade 4 Students . .	63
Figure 28	Racial/Ethnic Group by Service Model - Grade 8 Students . .	64
Figure 29	Racial/Ethnic Group by Service Model - Grade 10 Students .	65
Figure 30	Preschool Experience by Model - Grade 4 Students	68
Figure 31	Preschool Experience by Model - Grade 8 Students	69
Figure 32	Preschool Experience by Model - Grade 10 Students	70
Figure 33	Days Absent by Service Model - Grade 4 Students	72
Figure 34	Days Absent by Service Model - Grade 8 Students	73
Figure 35	Days Absent by Service Model - Grade 10 Students	74
Figure 36	Learning Resources in the Home - Grade 4 Students	76
Figure 37	Learning Resources in the Home - Grade 8 Students	77
Figure 38	Learning Resources in the Home - Grade 10 Students	78
Figure 39	School and Community Activities - Grade 8 Students	81
Figure 40	School and Community Activities - Grade 10 Students	82
Figure 41	Anticipated Schooling - Grade 8 Students	84
Figure 42	Anticipated Schooling - Grade 10 Students	85

THE NATIONAL ASSESSMENT OF ECIA CHAPTER 1

The technical amendments to the Education Consolidation and Improvement Act (ECIA) Chapter 1 passed in December 1983, authorized a national study of compensatory education programs funded under this law. The National Institute of Education (NIE), charged with this task, was required to provide two interim reports to Congress in 1986 and a final report in January 1987. The reports will be taken into consideration in the reauthorization hearings scheduled for that year.

The NIE planned a national assessment that would address three major issues in the reports:

1. The Nature and Extent of Students' Need for Compensatory Education Service

2. The Size and Variability of Program Effects

3. The Current Operation of the Program and the Prospects for Improving it

In order to capitalize on existing knowledge, resources and databases, the NIE plan proposed that the research be conducted by a variety of contractors using multiple research methods. The final plan issued in November 1985, by the NIE (now named the Office of Educational Research and Improvement (OERI)) called for 15 specific studies with research questions designed to address the above listed issues. One of the studies titled "Analysis of School District and State Education Agency Records" had two purposes:

1. To determine the patterns of categorical services students receive over multiple years and the extent to which students receive multiple services within a given school year

2. To determine the long-term educational accomplishments of students who have been served by compensatory education programs

The Testing and Evaluation Unit of the Office of the Superintendent of Public Instruction (OSPI), State of Washington, responded to RFP No. NIE-R-85-0015 with a proposal to study the categorical program participation of Chapter 1 students under research category 1.

Contract 400-86-0027 was awarded to Washington State OSPI to analyze state and school district records from three existing databases: the Grants Reporting and Program Evaluation System, the State Assessment Program and a large school district's records. This report presents the findings of that study.

SECTION 1: BACKGROUND AND STATE POLICY CONTEXT

1.1 Introduction

This report summarizes a research effort conducted by the Testing and Evaluation Unit, Washington State Office of the Superintendent of Public Instruction (OSPI), in collaboration with the Northwest Regional Educational Laboratory (NWREL) Portland, Oregon, and the Pasco School District, Pasco, Washington. The purpose of the study was to review the extent to which students served by Chapter 1 also received services from other categorical programs. In addition, the characteristics and achievement levels of the singly and multiply served child were reviewed. Multiple service delivery was viewed in the context of a school year (September to June). In doing so, typical patterns of compensatory service delivery were identified and described.

There are five sections in this final project report. This first section introduces select educational, research and policy issues pertinent to the study of multiple program participation. It also presents background information on the Washington State compensatory education programs and policies reviewed in this study. Section 2 introduces the reader to the databases used in the analyses of existing records. Variations in the databases, key factors affecting the interpretation of findings, are described here. The procedures used in the data analysis as well as the quality control measures are contained in Section 3. The findings, grouped by objective and research question, are presented in Section 4. The salient findings are summarized in Section 5.

1.2 Rationale for the Study and Study Objectives

Chapter 1 of the Education Consolidation and Improvement Act (ECIA) of 1981, which replaced Title I of the Elementary and Secondary Education Act (ESEA) of 1965, continued federal support to meet the special needs of educationally deprived children. The law states that funds be directed to ". . . local education agencies serving areas with concentrations of children from low-income families. . ."

U. S. Department of Education regulations stipulate that children who are in "greatest need" be given priority service. Furthermore, Chapter 1 programs are required to supplement rather than supplant local and state programs. Program design and the specific process for the selection of program participants remain a local school district prerogative.

In making crucial educational program placement choices, school personnel must respond to several questions: Who will or will not be served given the eligibility criteria of each program?, How many children can be served given the limits of the school district's grant award?, What combination of program service is best for the child with multiple needs? The responses to these questions have produced a myriad of practices across the nation.

Program placement decisions are not made easier by the multiplicity of available federal and state programs. While the creation of Chapter 2, the federal block grant program, did much to reduce the plethora of federal categorical programs, many programs including Chapter 1, maintain unique identities. Chapter 1 itself contains separate enactments for special subpopulations including the children of migrant laborers and neglected or delinquent youth. In addition, several states have passed laws establishing state-supported compensatory education, bilingual education and special categorical programs. The burden of effectively combining program dollars continues to be a local responsibility.

Is multiple program participation a positive or negative experience for the special needs child? The issue is viewed both ways. It is recognized that many children need, qualify for and obtain an array of special services in the course of one year. Most program regulations and education practice support and encourage program interface. For example, it would not be unusual to find a limited-English-speaking child served by a state compensatory program in mathematics, the federal Chapter 1 program in reading and a state or federally funded bilingual education program for special subject matter tutoring. The combination of programs fits the needs of the educationally deprived child and school district program availability. The school district in fact, may be legally obligated to provide for all of the needs of its special student subpopulations.

While few educators question the benefit of supplementary education in principle, there are many who object to policies that have resulted in uncoordinated student schedules detracting from the basic education program. These critics suggest that if a child is continually pulled out of the regular classroom for special programs, his or her overall educational development may be negatively affected. In their view, multiple program participation should be carefully limited.

How many children are served by more than one special program in the course of one school year? While each state education agency and federal program office keeps records of the numbers of students served in each separate program, there have been few attempts to view multiple service participation using the student as the unit of analysis. Similarly, with program placement and program interface remaining a local decision, there have been no state-level studies of program interrelationships. Finally, and most importantly, we know little about the students who are served in one or more special programs. How are they different from the student who is not served by a special program? What are their achievement levels? What are the factors that may have prompted multiple program placement?

The research base from which answers to these questions can be drawn is minimal. The desire to review the phenomena of multiple program participation prompted this study. In an attempt to address the questions listed here, and to fit within the larger context of the national Chapter 1 study, four specific objectives were formulated and are stated below.

Objective 1: To describe the extent to which students served in ECIA Chapter 1 programs in Washington State also are served by other categorical programs

Objective 2: To describe the achievement levels of students served by one or more compensatory education programs.

Objective 3: To describe the characteristics of children who are the recipients of multiple program services

Objective 4: To describe common patterns of multiple categorical program service delivery

These objectives were accomplished through an analysis of existing and routinely collected state education agency and school district records. Three sources of data were used. These included the Washington State Grants Reporting and Program Evaluation System (GRAPES) files, the Washington State Assessment Program database and compensatory education program participation records and individual student files from the Pasco School District.

The project required reformatting of these data, the creation of new computer files and additional programming but no new collection of data. A complete description of the databases and their relationship to study objectives is provided in Section 2.

1.3 State Population Description

The study analyzed data from the school population of the state of Washington. Divided by the Cascade Mountains, the eastern and western halves of the state display very different geographical characteristics. Eastern Washington is, for the most part, rural and sparsely populated. Spokane, the east side's largest metropolitan area, has a population of 170,000. The two other population centers of medium size are the Tri-Cities area; composed of the cities of Pasco, Kennewick and Richland; and the Yakima area. The eastern Washington economy is largely agricultural with the rich Yakima, Okanogan and Palouse Valleys supporting major vegetable, fruit and wheat crops. The Hispanic population in the state is concentrated in eastern Washington as the result of an influx and settling out of migratory farm workers.

Western Washington has a considerably higher population density clustered along the Interstate 5 corridor and the suburban areas surrounding Puget Sound. Seattle, the state's largest city with just over one-half million people, is the urban core and a major seaport. Western Washington has a diverse mix of business and industry that includes aerospace, high technology, timber and fishing. Four major military installations representing all areas of the armed services result in a highly mobile population in the Tacoma and Bremerton areas. The state's Asian population is concentrated in western Washington urban areas. Washington State is the location of 35 American Indian reservations.

1.4 Categorical Program Participation

As of October 1984, the 299 operating school districts in the state reported pupils enrolled in 1,680 public schools and 441 private schools. The SPI School Enrollment Reports for that time period indicated a public school enrollment of 741,130 students, and a private school enrollment of 60,688.

The largest categorical program in the state is the federally funded ECIA Chapter 1 Regular Program. A total of 59,562 public school children (unduplicated count) or 8 percent of the state public school population were served by the program in the 1983-84 school year. An additional 990 nonpublic school students and 545 students in local programs for neglected or delinquent youth were participants in Chapter 1. In total, 61,097 children received Chapter 1 Regular services in 283 (95%) of Washington State's school districts.

Washington State has the fourth largest migrant student population in the nation, hence it operates a large and well-established ECIA Chapter 1 Migrant Education Program. In the 1983-84 school year 15,850 migrant children were identified and registered on the Migrant Student Record Transfer System. A total of 7,989 (50.4%) of these students were served in instructional programs in 60 Washington school districts. The migrant student population is largely Hispanic (82%).

In 1984-85, the state of Washington reinstituted a compensatory education program titled the Remediation Assistance Program (RAP) as a result of a state supreme court ruling calling for state supported compensatory education as a part of basic education. During the 1984-85 school year, 273 school districts received a total of 10.5 million dollars for programs in grades 2-9. This program served 11,649 students in grades 2-9 in reading; 15,597 in math; and 4,217 in language arts. Table 1 summarizes categorical program participation in Washington State in the 1984-85 school year.

Table 1

Washington State Categorical Program Participation
1984-85

	Unduplicated	Duplicated by Subject*	Number of Districts with Progams
Chapter 1 Regular	59,734	66,902	299
Chapter 1 Migrant	6,980	11,089	60
Remediation Assistance	28,618	31,460	278

* Includes the total served in Reading, Math, Language Arts. Chapter 1 Migrant also includes oral language development.

1.5 State Categorical Program Policies

In Washington State, federal and state compensatory education programs are administered through two divisions of the Office of the Superintendent of Public Instruction. The state Remediation Assistance Program (RAP), ECIA Chapter 1 Regular and Special Education programs are in the Division of Special Services and Professional programs. The ECIA Chapter 1 Migrant and the state and federal Bilingual programs are housed in the Division of Instructional Programs and Services.

The Migrant and Bilingual education programs have separate administrators. The ECIA Chapter 1 Supervisor also manages the RAP since it is patterned after Chapter 1. The Special Education program has a Director supervising seven program specialists who are responsible for specific geographical areas of the state.

These administrative context variables are important because at the state level, variations may be noted in ECIA Chapter 1 Regular and ECIA Chapter 1 Migrant state policies and procedures. This in turn affects program coordination at the local level.

Greater differences occur at the local level due to a State Superintendent of Public Instruction philosophy that emphasizes "local control." State program supervisors mandate adherance to federal guidelines. However, there are several areas within Chapter 1 program administration for which there is no specific state policy. The prime example is the process of student selection. Unlike some other states, Washington OSPI does not specify a specific achievement level as defined by a test score for student selection. Qualified students who are "below grade level" are rank ordered for admittance to the program with those most in need of being served first. The local education agency defines "below grade level" and this varies from below the 25th percentile to below the 49th percentile. While information about local selection procedures is not collected, a recent analysis of state testing program data show that the majority (64 percent) of Chapter 1 reading students tested in October at the 23rd percentile or below, and 84 percent were at the 40th percentile or below. In mathematics, 53 percent of Chapter 1 students scored at the 23rd percentile or below; 78 percent were below the 40th percentile.

The state RAP program also allows district definition of "below grade level" at grades 2-6. Students in the grade 7-9 programs must score below the 25th percentile to receive RAP services.

In the context of this study, two other locally controlled variables affect program service configurations. These are: program design (subject, grade levels served and program objectives) and program interface (the availability and/or coordination of specific programs within a given school district). The amount of the grant award, the characteristics of the student population and the availability and placement of staff are the factors most usually cited as affecting program design and coordination.

1.6 Representativeness

The study reviewed only one state's categorical program patterns. However, several factors made it a very good case to review. Washington State's Chapter 1 Program is a very typical program, ranking 24th out of 50 state education agencies (SEAs) in size of grant award. It is also in the middle range of number of students served. Washington, however, is the second largest program in the Western United States, ranked after California. The population served is from urban and rural areas of high and low population density and is ethnically diverse.

As noted above, the state has an established and visible migrant education program and a state-supported compensatory education program. The state's school districts, therefore, have many possible categorical program choices for children in need.

SECTION 2: THE DATABASES AND FACTORS AFFECTING INTERPRETATION

2.1 Use of Multiple Databases

The present project was completed entirely through the analysis of two existing databases maintained by Washington State SPI and a third database maintained by Pasco School District. Using existing data, which was the intent of the OERI request for proposals, allowed the project to produce policy relevant information at minimum additional cost to the state and the federal government. That three different databases were used in the analysis, however, must be kept in mind as the reader reviews the results of the project.

First, each objective of the study was designed to fit a particular existing database. It is important to review each finding in light of the characteristics of the particular source of data from which it has been drawn. For example, the state GRAPES files contain only group-level data and questions related to student characteristics or achievement cannot be drawn from this file. Neither does this database address subject distinctions.

Second, each database exhibits unique characteristics that affect interpretation of the findings. Characteristics that vary include date of data collection, source, unit of analysis and completeness.

2.2 The Grants Reporting and Program Evaluation System Files

The Washington State Superintendent of Public Instruction (SPI) maintains data on the extent to which Chapter 1 students are also served by other programs (Objective 1) in the Grants Reporting and Program Evaluation System (GRAPES) database.

The state GRAPES database is used for the storage and processing of SPI end-of-year report data. Separate files are maintained for Chapter 1 Regular, Chapter 1 Migrant, Remediation Assistance Program, and the Bilingual Education Program. While duplicated and unduplicated counts of students have been available by program for many years, information on children served by more than one program had not been collected prior to the 1984-85 school year.

Since reauthorizing the state compensatory programs, the Washington State Legislature has been interested in the extent to which children receive services from more than one program. Questions such as the following were asked: Do federal and state programs serve the same or different groups of children? How effective is program coordination for children with multiple needs? Are any needy populations underserved?

The SPI Testing and Evaluation Unit, charged with preparing federal and state program evaluation reports, planned a special data collection to review multiple program service in the fall of 1984. The intent was to review the numbers and percentages of students served by more than one program without greatly increasing the amount of data submitted to the SPI by state school districts.

The additional data collection was accomplished by designing a new Section II, titled the "Comprehensive Services Report," to be included as part of the end-of-year report for each federal and state program. Each Section II documented a school district's unduplicated student count in each program and requested the number of students who also received services from another program. Coordinating the questions across the end-of-year report forms for the four separate programs resulted in a total of ten unique responses on program overlap from all school districts in the state that hosted those programs.

School district personnel were informed in the fall of 1984 that these questions would be included on spring 1985 year-end reports for this special state study. During the time period between June 15, 1985, and October 30, 1985, the end-of-year reports were reviewed, edited and entered into the state GRAPES database. Given the mandatory nature of state end-of-year reporting, 100 percent of the state's school districts submitted usable data. The Comprehensive Services Report forms from the state's Chapter 1 Regular, Chapter 1 Migrant, and Remediation Assistance Program, are provided in Appendix A.

For the purposes of this study, project staff wrote computer programs to report the number and percent of students and districts for each combination of programs to respond to Objective 1.

2.3 The Washington State Assessment Program Files

The Washington State Assessment Program provides student data on basic skills achievement status, participation in compensatory programs and survey responses. The Revised Code of Washington section 28A.03.360 requires the Washington State Superintendent of Public Instruction to administer and report annually the results of a statewide test of basic skills achievement. In the first week of October 1985, the Metropolitan Achievement Test (MAT 6), published by the Psychological Corporation, was administered to all students in grades 4, 8 and 10.

All students participating in the state assessment program were given a student questionnaire with 10 to 16 questions appropriate for his/her age and grade, covering interests, plans, experiences and self-assessment. On the questionnaire, space is provided to code the student's program participation by subject. The student questionnaires for each grade are provided as Attachment B.

Fifteen models of program participation were defined to guide the analyses of the assessment data. Statistics describing achievement status in reading and math were calculated for each model to respond to Objective 2.

Responses from the questionnaire were cross-tabulated with program participation models to provide information on the characteristics and experiences of the multiply served, singly-served, and non-served student. These analyses respond to Objective 3.

Given the number of variables, 10 to 16 questions per grade by 15 models of service delivery, many research questions could be addressed. The questions deemed most appropriate for this study of multiple program participation as well as the larger national study are presented in this report.

2.4 Pasco School District Files

The two large state databases provided extensive information on Chapter 1 served students and their counterparts who received more than one categorical program service at the state level. The state databases, however, can not present the totality of any one student's program nor can they give an insight into why services and programs have been aligned in a specific manner.

To view the subtleties of multiple program participation and to gain an insight into the rationale for making such decisions, a single school district's records on individual Chapter 1 students and the extent to which they receive multiple program services was reviewed (Objective 4). The final study objective was achieved through case study analyses from these records.

The description of typical patterns of service and of the characteristics of these students, Objective 4, is portrayed via case studies of multiply served children in the Pasco School District in southeastern Washington State. Pasco's Chapter 1 Regular Program is the 12th largest program in the state, serving 1,023 students during the 1984-85 school year. The Chapter 1 Migrant program served 1,117 students in instruction. The total school district population is approximately 5,700.

Project staff made a May 30 site visit to the Pasco School District. The purpose was to review the participating local compensatory programs while in operation and to examine the past year's student records. A second major purpose was to view the local decision-making process for compensatory program placements in relation to student characteristics and program availability.

Discussions with classroom teachers, the Chapter 1 coordinator, building administrators and record keeping clerks led to the identification of common patterns of student service.

The identification of the service models at Pasco were used in two ways in this study. The patterns became the unit of analysis for analyzing the state assessment data files for the completion of Objectives 2 and 3. The patterns were also used in the selection of the case studies for the completion of Objective 4.

Identifying these common patterns or models allowed project staff to develop a coding system that would guide the records analysis and case studies.

The discussions also revealed the relationships between the instructional programs. In this district, RAP is functionally equivalent to the Chapter 1 program, both are reading programs. Unlike most other Chapter 1 programs in the state, however, the Pasco Chapter 1 program serves students in the regular classroom rather than in a pullout setting.

The district kept careful records of categorical program participation during the 1985-86 school year in a comprehensive worksheet. For each program the entry and exit date were recorded along with student characteristics and reasons for leaving the school or program.

Project staff entered the entry and exit dates, and other data for students in grades 1 through 4, into a microcomputer database. This database was used to tally the number of students falling into different service models and to perform quality control analyses.

Twenty-three students who participated in multiple programs were selected for case studies. Each case details a student's program service, starting and ending dates of program participation, test scores, program selection and exit criteria, and student descriptive variables. In addition, once the students were selected for the case review, their complete school record (with names and identifying information removed) was provided to the case study writer.

2.5 Comparison of Databases

In summary, three very different sources of data were analyzed to view the extent to which the Chapter 1 students participate in other categorical programs. The overall state picture for Objective 1 was drawn through the analysis of the GRAPES files. A view of student characteristics evolved through the completion of Objectives 2 and 3 using state assessment program data. Finally, detailed program participation patterns were noted through the analysis of Pasco School District student files and the production of case studies in fulfillment of Objective 4. Table 2 summarizes the relationship of the data sources and the study objectives.

Table 2

Relationship of Databases to Study Objectives

Database	Objectives to be Met
Superintendent of Public Instruction GRAPES Files	**Objective 1:** To describe the extent to which students served in ECIA Chapter 1 programs in Washington State also are served by other categorical programs
Washington State Assessment Program Data	**Objective 2:** To describe the achievement levels of students served by one or more compensatory education programs
	Objective 3: To describe the characteristics of children who are the recipients of multiple program services
Pasco School District Student Records	**Objective 4:** To describe common patterns of multiple categorical program service delivery

Table 3 summarizes important characteristics of the three databases that may affect the interpretation of the results. The GRAPES database provides a statewide view of multiple program participation over a full school year but gives an incomplete view of the specific nature of the participation. The State Assessment database provides extensive information on individual students in a consistent format across three grade levels. With testing in October, however, these data cannot reflect the temporal relationship among programs during the year. In fact, migrant students are underrepresented since many of them do not reach the state until after October. While the Pasco database is restricted to one district, the records provide the richest description of student characteristics and the kinds of services provided. In particular, only this database provides the entry and exit dates for each program and the reason for exiting the program.

Table 3

Summary of Database Characteristics

Database Characteristic	GRAPES Database	State Assessment	Pasco Records
Scope of Database	Statewide	Statewide	One district
Level of Analysis	District	Student	Student
School Year	1984-85	1985-86	1985-86
Date of Data Collection	July	October	Sept. - June
Grade Level	K-12 combined	4, 8, 10	K-8
Data Available	Student counts	Test scores Survey results	Complete student records
Description of Services:			
Program participation	yes	yes	yes
Subject served in		yes	not applicable
Reason for exiting			yes
Entry and exit dates			yes

SECTION 3: DATA ANALYSIS

3.1 Quality Control Checks

Prior to the analysis of data, a variety of quality control checks were performed on each database. For the most part, the checks confirmed the validity of the data with some qualifications. The quality control measures established for the study are detailed below for each of the databases.

GRAPES Database

All school districts scheduled to report descriptive data on ECIA Chapter 1 programs were able to do so at the end of the 1984-85 school year. This included 281 districts hosting Chapter 1 Regular programs and 60 districts with Chapter 1 Migrant programs.

The data on comprehensive service, as reported on end-of-year reports in 1985, were collected as part of a one-time-only study. Therefore, comparisons of numbers and percentages served in other years could not be made.

State Assessment Database

State assessment program results were based upon the testing of 49,056 fourth-grade students, 50,675 eighth-grade students and 55,243 tenth-grade students during the first week of October 1985. State management information reports on school enrollments, collected on October 1 of that same year, enable the calculation of the percent of the state's students tested. The percentages by grade were: fourth grade, 93 percent; eighth grade, 91 percent; and tenth grade, 86 percent. Thus the assessment results are based on a high percentage of the students at those grades statewide.

To ensure that program participation was accurately coded, project staff paid special attention to the reasonableness of the counts obtained from the assessment database. Table 4 lists the number of students tested in the state assessment by program. State enrollment counts taken on October 1 of each year are not broken out by program classification. Therefore, it was not possible to determine the exact percentage of students in special programs who were tested.

However, three other data sources were reviewed to estimate the percentage tested. These were the Migrant Student Record Transfer System (MSRTS), state assessment school survey, and the GRAPES database.

Table 4

Number of Students Tested
October 1985

		4th	8th	10th
Chapter 1 Regular	Reading	3,719	1,075	218
	Math	1,629	506	86
	Language	430	375	276
Chapter 1 Migrant	Reading	325	77	54
	Math	183	84	27
	Language	106	30	48
	Oral Language	105	33	2

The MSRTS state records showed that in October 1985 there were 403 fourth-grade migrant students enrolled in school, 204 eighth-grade students, and 150 tenth-grade students. While these numbers were reasonable in relation to the number tested, one problem was discovered in a district-by-district examination of the number of migrant students tested. Several school districts without an ECIA Chapter 1 Migrant funded program indicated that migrant students were tested. This is very possible in a state with a large influx of migrants since teachers may recognize that a student is from a migrant family but may fail to check whether that student is receiving Migrant program services. However, the directions specifically directed testing staff to code only those students served by ECIA Chapter 1 Migrant education program funds. To partially correct the problem, students from school districts without funded EICA Chapter 1 Migrant programs were recoded as nonmigrant.

To ensure that there was not a similar problem with Chapter 1 students, the number of students marked as Chapter 1 was checked for schools that did not have Chapter 1 programs. These data were available in a State Assessment School Survey file which included results from a survey to principals and aggregate results from the student level file. The analysis showed few cases where students were marked as Chapter 1 in non-Chapter 1 schools. In addition, there was a high correspondence between the number of Chapter 1 students reported by the administrator and the number of Chapter 1 students tested in the assessment.

By coding program participation without regard to subject, the number of students with different combinations of service could be compared to the results of the GRAPES database. Table 5 gives the number and percent of students served in other programs by grade. These results are in line with the GRAPES results if one keeps in mind that Assessment data reflect only October services and that GRAPES data combine all grades with emphasis on the primary grades. The Migrant counts, however, seems to be underrepresented since many migrant children leave the state in September and do not return again until the following spring.

Table 5

Number and Percent of Students
Served in Multiple Programs
by Grade

	Number of Participants			Percent of Participants		
	Chapter 1	Migrant	RAP	Chapter 1	Migrant	RAP
Grade 4 (n = 51,888)						
Total Served	4,940	297	2,682	9.5%	0.6%	5.2%
Also Served in:						
Chapter 1	-	64	663	-	21.5	24.7
Migrant	64	-	35	1.3	-	1.3
RAP	663	35	-	13.4	11.8	-
Special Ed.	279	17	147	5.6	5.7	5.5
Bilingual	142	74	63	2.9	24.9	2.3
Grade 8 (n = 54,987)						
Total Served	1,804	82	1279	3.3	0.1	2.3
Also Served in:						
Chapter 1	-	10	211	-	12.2	16.5
Migrant	10	-	12	.6	-	.9
RAP	211	12	-	11.7	14.6	-
Special Ed.	172	13	73	9.5	15.9	5.7
Bilingual	51	32	28	2.8	39.0	2.2
Grade 10 (n = 60,644)						
Total Served	567	67	-	.9	.1	-
Also Served in:						
Chapter 1	-	5	-	-	7.5	-
Migrant	5	-	-	.9	-	-
RAP	-	-	-	-	-	-
Special Ed.	43	4	-	7.6	6.0	-
Bilingual	15	30	-	2.6	44.8	-

Note - RAP was not offered in Grade 10.

Source: 1985 Washington Statewide Assessment

Pasco Records Analysis

During the site visit to Pasco, interviews and observations made it clear that the district staff do keep careful records of categorical program participation. The student cumulative files were comprehensive and well kept.

Since the Pasco records and the State Assessment data covered the same school year, it was possible to compare the counts from the two databases. Table 6 gives the number and percent of grade 4 Pasco students served in multiple programs from the two databases. Note that the numbers in the assessment database closely match the counts obtained from the records analysis when only students being served on October 1 were considered. This table further demonstrates the validity of the data in the two databases.

Table 6

Number and Percent of Grade 4 Pasco Students Served in Multiple Programs

	Number of Participants			Percent of Participants		
	Chapter 1	Migrant	RAP	Chapter 1	Migrant	RAP
Reported in Records Analysis (n = 509)						
Total Served	94	97	50	18.5%	19.1%	9.8%
Also Served in:						
Chapter 1	-	16	7	-	16.5	14.0
Migrant	16	-	6	17.0	-	12.0
RAP	7	6	-	7.4	6.2	-
Special Ed.	3	12	2	3.2	12.4	4.0
Bilingual	20	52	11	21.3	53.6	22.0
Reported in Records Analysis, October 1 (n = 419)						
Total Served	68	56	28	16.2	13.4	6.7
Also Served in:						
Chapter 1	-	14	6	-	25.0	21.4
Migrant	14	-	4	20.6	-	14.3
RAP	6	4	-	8.8	7.1	-
Special Ed.	2	9	1	2.9	16.1	3.6
Bilingual	12	29	9	17.6	51.8	32.1
Reported in Assessment Database (n = 404)						
Total Served	72	55	28	17.8	13.6	6.9
Also Served in:						
Chapter 1	-	21	2	-	38.2	7.1
Migrant	21	-	5	29.2	-	17.9
RAP	2	5	-	2.8	9.1	-
Special Ed.	2	9	3	2.8	16.4	10.7
Bilingual	9	18	5	12.5	32.7	17.9

There were, however, two exceptions to the equivalence found between the two databases. The Assessment database yields fewer bilingual students and more migrant students. It is likely that several bilingual students with severe English problems did not take the Assessment test. Teachers may have coded some students from migrant families as ECIA Migrant that were not receiving instructional services from this program.

3.2 Evolution of the Models Used in the Analyses

Given the total number of combinations of five programs and three subjects available in the Assessment database, it was obvious that all possible combinations could not be used in the analysis of the larger statistical databases. The most common variations were included in the review of the state assessment data. This resulted in the following combinations being selected for the analysis of data for Objectives 2. The code, pattern description, and number and percentage of cases exhibited in the state assessment database are listed in Table 7.

Table 7

Number and Percent of Students by Service Model

Code	Model	Number			Percent		
		Gr 4	Gr 8	Gr 10	Gr 4	Gr 8	Gr 10
All	All Students	51,888	54,987	60,644			
No	No Services	42,251	49,213	57,582	81.4%	89.5%	95.0%
Cr	Chapter 1 Reading only	2,279	675	168	4.4	1.2	.3
Cm	Chapter 1 Math only	679	267	48	1.3	.5	.1
Mr	Migrant Reading only	48	9	4	.1	.0	.0
Mm	Migrant Math only	21	3	2	.0	.0	.0
Rr	RAP Reading only	700	206	-	1.3	.4	-
Rm	RAP Math only	784	306	-	1.5	.6	-
B	Bilingual only	354	309	344	.7	.6	.6
L	Learning Disabled only	1,769	2,113	1,711	3.4	3.8	2.8
H	Handicapped only	273	376	342	.5	.7	.6
M2	Migrant 2 or more subjects	65	15	22	.1	.0	.0
Crm	Chapter 1 Reading and Math	626	100	13	1.2	.2	.0
CrRm	Chapter 1 Reading and RAP Math	324	59	-	.6	.1	-
CS	Chapter 1 and Special Education	220	155	39	.4	.3	.1
CB	Chapter 1 and Bilingual	99	33	10	.2	.1	.0
MB	Migrant and Bilingual	41	22	27	.1	.0	.0

Note - RAP not funded at grade 10.

Source: 1985 Washington State Assessment database

To ensure adequate numbers for each model in examining the demographic and school experience characteristics for Objective 3, a further compression of the models were made. The variation for subject was removed to increase the number in the service categories. Chapter 1 Regular was indicated as the combination lead and grouped with the three smaller programs. The Bilingual program was most often combined with a reading program, therefore, the final combination was any other reading program and Bilingual.

Table 8 lists the codes, model description and number of cases by grade exhibited in the state assessment files and used in the analyses for completion of Objective 3.

Table 8

Number and Percent of Students by Compressed Service Model

Code	Model	Number			Percent		
		Gr 4	Gr 8	Gr 10	Gr 4	Gr 8	Gr 10
All	All Students	51,888	54,987	60,644			
No	Services	42,251	49,213	57,582	81.4%	89.5%	95.0%
C	Chapter 1 only	3,897	1,399	509	9.2	2.8	.9
M	Migrant only	152	31	33	.3	.1	.1
R	RAP only	1,867	997	-	3.6	1.8	-
B	Bilingual only	354	309	344	.7	.6	.6
L	Learning Disabled only	1,769	2,113	1,709	3.4	3.8	2.8
H	Handicapped only	273	376	1	.5	.7	.0
CM	Chapter 1 and Migrant	38	5	2	.1	.0	.0
CR	Chapter 1 and RAP	592	176	33	1.1	.3	.1
CS	Chapter 1 and Special Ed.	220	155	8	.4	.3	.0
rB	Reading and Bilingual	99	31	81	.2	.1	.1

Note - RAP not funded at grade 10.

Source: 1985 Washington State Assessment database

3.3 Data Management

The analyses were conducted with a variety of computers and software. The GRAPES database was managed with the Datatrieve database package on a VAX 11/780 and analyzed using the SPSS-X statistical package. The statewide assessment database was also analyzed using SPSS-X on the VAX. The tables and graphs were generated using the SuperCalc 3 spreadsheet program on an AT&T PC 6300 microcomputer and an HP 7475A plotter. The Pasco records were entered and manipulated using the REFLEX database program on the microcomputer.

SECTION 4: PRESENTATION OF FINDINGS

4.1 The Extent of Multiple Program Participation in One State

The initial computer runs merging the GRAPES data files produced counts of the number of students served in Chapter 1 Regular, Chapter 1 Migrant and RAP. To assess the extent of overlap between programs, these computer runs also calculated the number and percent of students receiving services in each one of these programs and one other program. These data are presented in Table 9 and Figure 1.

Note that the percentages shown on the right side of Table 9 are taken from several different bases. The percentage in the row labeled Total Served are the number of students served in Chapter 1 Regular, Chapter 1 Migrant and RAP as a percentage of statewide enrollment. For example, the 6,980 students in the Chapter 1 Migrant program are 0.9 percent of the statewide enrollment.

The 1,160 students receiving Chapter 1 Regular and Chapter 1 Migrant Services are expressed as two different percentages.

- The 1,160 students as a percentage of the 59,734 students who are in Chapter 1 Regular equals 1.9 percent.
- The 1,160 students as a percentage of the 6,980 students in Chapter 1 Migrant equals 16.6 percent.

Table 9

Number and Percent of Students
Served in Multiple Categorical Programs

	Number of Participants			Percent of Participants		
	Chapter 1	Migrant	RAP	Chapter 1	Migrant	RAP
Total Served	59,734	6,980	28,618	8.1%	.9%	3.9%
Also Served in:						
Chapter 1	-	1,160	5,230	-	16.6	18.3
Migrant	1,160	-	690	1.9	-	2.4
RAP	5,230	690	-	8.8	9.9	-
Special Ed.	3,125	435	639	5.2	6.2	2.2
Bilingual	1,207	2,426	519	2.0	34.8	1.8

Note - The Washington statewide enrollment was 741,130.

Source: 1984-85 GRAPES database

The reader should take care to use the base that is most meaningful to the question he/she wishes to answer.

This section presents GRAPES data addressing three research questions related to the categorical program participation. An analysis of program service overlap follows.

Research Question 1. To what extent is the Chapter 1 Regular-served child also served by other categorical programs?

In 1984-85, 59,734 children were served in Chapter 1 Regular programs in Washington State (unduplicated count). During the same school year:

- 1,160 of these children (1.9%) were also served by the Migrant program.
- 5,230 of these children (8.8%) were also served by RAP.
- 3,125 of these children (5.2%) were also served by Special Education.
- 1,207 of these children (2.0%) were also served by the Bilingual program.

Because GRAPES does not distinguish subject matter, this overlap includes students who are receiving services in both programs but in different subject areas as well as those who are receiving services in the same subject area. These percentages are, therefore, an upper bound estimate of the amount of overlap.

Overall, the extent to which the Chapter 1 student receives additional services seems limited, less than 9 percent by any one program. The most likely combination of program service is Chapter 1 Regular and the state RAP. The latter finding is not suprising since many districts serve students in one subject with Chapter 1 funds and another with RAP funds.

Research Question 2. To what extent is the Chapter 1 Migrant-served child also served by other categorical programs?

During the 1984-85 school year 15,942 students were eligible for ECIA Chapter 1 Migrant Education Programs - in Washington, 6,980 (43.7%) were served in Migrant Education instructional programs through ECIA-funded programs.

When this particular subset of children reached school, 2,426 or 35 percent received additional service through a Bilingual education program. A total of 1,160 of these children (16.6%) also were served by Chapter 1 Regular. Just under 10 percent or 690 were also served by RAP. Approximately six out of every 100 of these ECIA Chapter 1 Migrant-served children are diagnosed as needing special education.

In summary, state service records show that only half of the eligible migrant children receive ECIA Chapter 1 Migrant service. When they do reach the program there is a great likelihood of being diagnosed as needing additional help. The additional service most likely will be Bilingual education. The Migrant served-child is slightly more likely than other served groups to need special education.

Research Question 3. To what extent is the Remediation Assistance Program student also served by another categorical program?

The state RAP program is in almost as many school districts as Chapter 1 Regular and serves approximately one-half as many students. Two factors influence this. The Chapter 1 allocation for 1984-85, excluding carryover, was $35.6 million, the state RAP budget for that same period was $13.1 million. The RAP and Chapter 1 programs also vary in funding formulation and student selection.

The state program, however, has been patterned after federal Chapter 1 and, as noted earlier, at the local level these programs are indistinguishable. Of the 28,618 students served in RAP, 5,230 students were also served in Chapter 1 (18.3%). This is probably due to a programmatic decisions to serve different subjects with different programs.

The RAP student, like the Chapter 1 Regular student, was not likely to be served by the Bilingual Education program. Only 519 students (1.8%) fit this pattern of service. Very few RAP students were served in special education, 639 -- or 2.2 percent. This low percentage is directly caused by a program regulation which prohibits RAP/Special Education services except for the special education categories of occupational therapy, physical therapy and communication disorders.

Research Question 4. At the individual school district level, what are the most commonly noted program combinations?

In some measure, the amount of overlap between any two programs is influenced by the number of districts that operate both programs. Table 10 and Figure 2 summarize this information.

Table 10
Number and Percent of Districts
Serving Students in Multiple Categorical Programs

	Number of Districts			Percent of Districts		
	Chapter 1	Migrant	RAP	Chapter 1	Migrant	RAP
Total Districts	281	58	271	94.0%	19.4%	90.6%
Also Serving Students in:						
Chapter 1	-	47	186	-	81.0	68.6
Migrant	47	-	38	16.7	-	14.0
RAP	186	38	-	66.2	65.5	-
Special Ed.	166	42	111	59.1	72.4	41.0
Bilingual	69	34	57	24.6	58.6	21.0

Note - Washington has 299 school districts.

Source: 1984-85 GRAPES database

FIGURE 1

Participants Served in a Second Program

Percent of Chapter 1, Migrant, or RAP

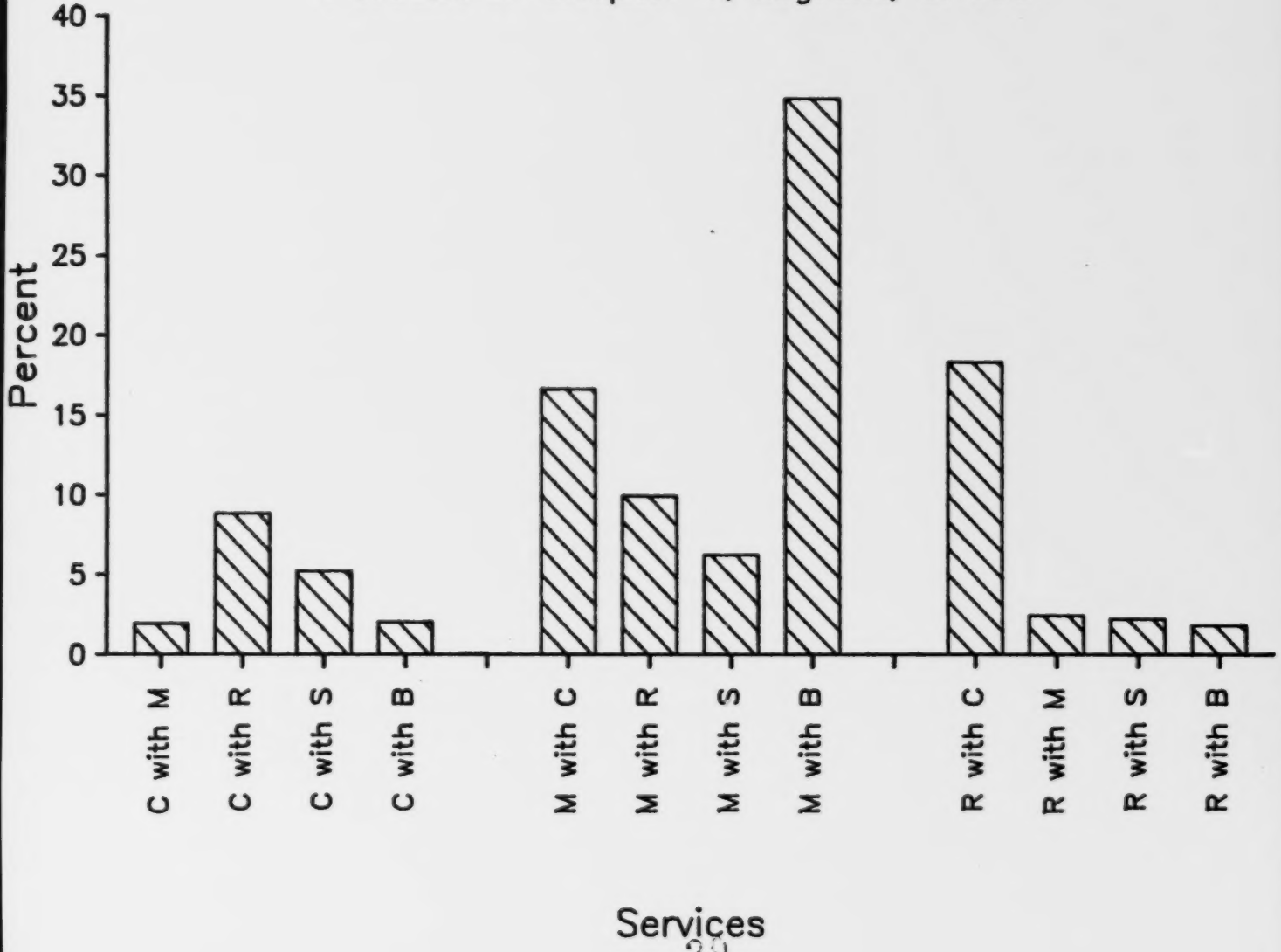
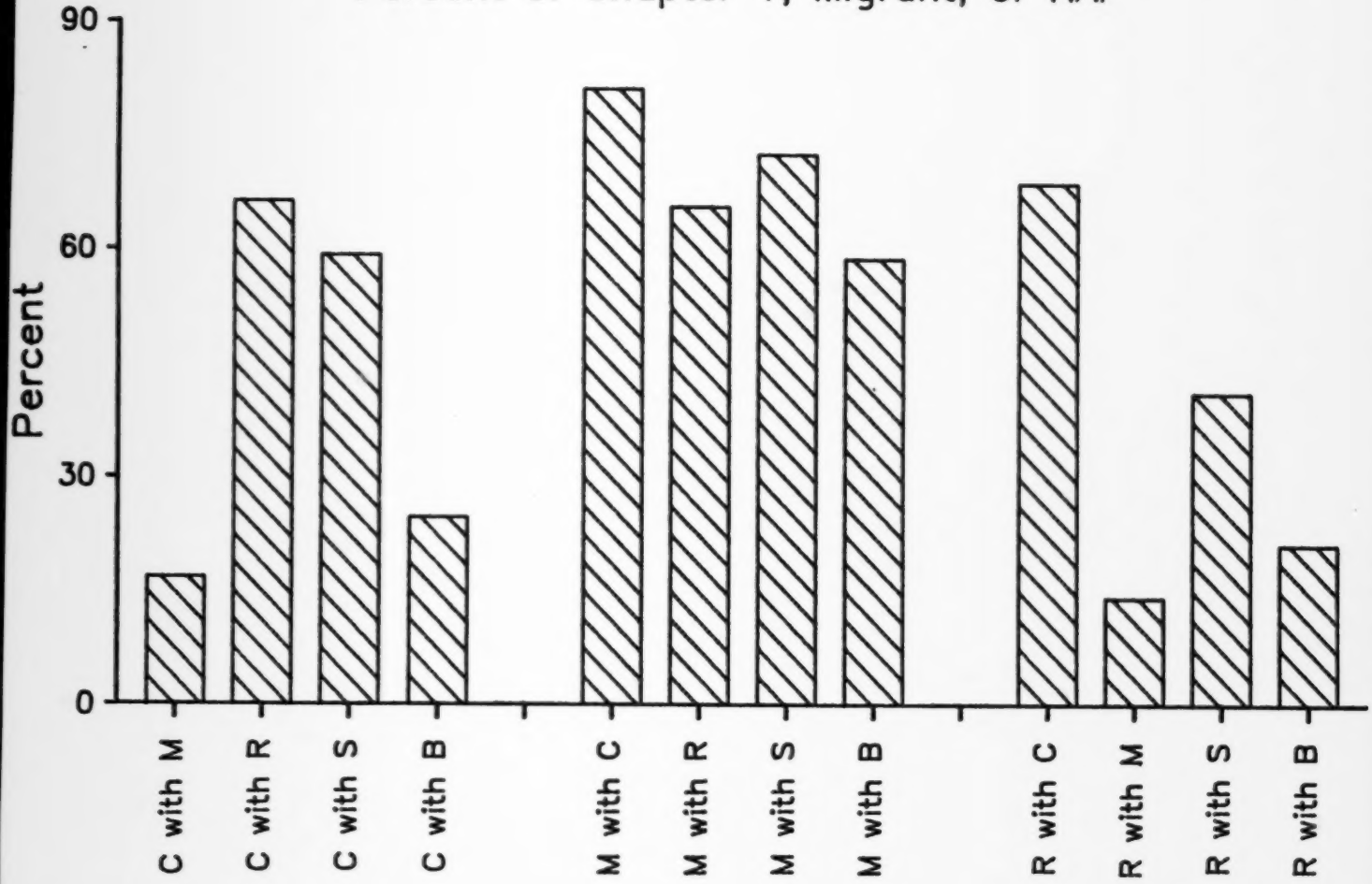


FIGURE 2

Districts with a Second Program

Percent of Chapter 1, Migrant, or RAP



Chapter 1 Regular Combinations Statewide

The analysis of individual school district services using the Chapter 1 Regular program as the base shows that the most commonly found program combination in the state is Chapter 1 and RAP. Sixty-six percent, 186 of the 281 Washington school districts with Chapter 1 Regular Programs, also served students in RAP.

The Chapter 1 Regular and Special Education combination is also prevalent. Of the 281 districts with Chapter 1 Regular, 166 districts or 59.1 percent also served students in Special Education.

The Chapter 1 Regular and Bilingual combination is exhibited in 25 percent of the state's school districts. Approximately 17 percent (47 districts) operate programs where Chapter 1 Regular and Chapter 1 Migrant program services operate concurrently.

Chapter 1 Migrant Combinations Statewide

Of the State's 299 school districts, 58, or 19.4 percent, operated ECIA Chapter 1 Migrant Programs during the 1984-85 school year. The majority of those districts also offer Chapter 1 Regular (81%) or Special Education (72%).

RAP Combinations Statewide

In 1984-85, 271 districts with Remediation Programs participated in state testing. Sixty-nine percent of those districts also provided services through Chapter 1 Regular programs. Other program combinations were much less in evidence. Forty-one percent of the districts with RAP Services also provided Special Education Services, 21 percent of the districts with RAP also operated Bilingual Programs, and 14 percent of the districts with RAP also operated Chapter 1 Migrant Programs.

While the 690 Migrant students also receiving RAP services (Table 9) comprise less than 0.1 percent of the total statewide student enrollment, about 13 percent of the state's districts must coordinate the Migrant program with services delivered via RAP.

The 2,426 students receiving both Chapter 1 Migrant and Bilingual program services represent about 0.3 percent of the statewide student enrollment. Services between Chapter 1 Migrant and Bilingual programs, however, must be coordinated in about 11 percent (34) of the school districts in the state.

4.2 Achievement Profiles of Special Program Populations

Objective 2 calls for a display of the achievement levels of students served by one or more compensatory education programs. Data for addressing Objective 2 were obtained from the Washington Statewide Assessment Program. All students in grades 4, 8 and 10, attending the public schools of the state, are required by law to be tested annually by the State Superintendent of Public Instruction. In the first week of October 1985, the sixth edition of the MAT was administered to the students enrolled in these three grade levels. The following findings, arranged by research question, are based upon data collected as part of that assessment.

Status in reading is summarized for grades 4, 8 and 10 by fifteen models of services that students received in Table 11 and Figures 3, 4 and 5. The scores from the Reading Total subscale of the MAT6 are reported in Normal Curve Equivalents (NCE). The table lists the number of students, the mean, the standard deviation and three quartiles for each service model. Status in math is summarized in Table 12 and Figures 6, 7 and 8. The scores from the Math Total subscale of the MAT6 are reported in NCEs. Figures 3 through 8 display the interquartile range, the 25th percentile to the 75th percentile as a vertical line. This line represents the achievement status of 50 percent of the students in that service model. The width of the interquartile range shows the variability of scores for that group. For example, note that the Bilingual only group is usually very heterogenous with respect to achievement. Status of the typical student is characterized by an X for the median score and a triangle for the average score.

Research Question 5. How do the reading and mathematics achievement levels of the singly-served student differ from those of the non-served student

At grade 4, students served only in a Chapter 1 Regular or a Chapter 1 Migrant reading program scored very similarly to each other and to students served in the state funded reading remediation assistance program. These three fourth-grade groups were clearly different in their reading performance from fourth-grade students receiving no remedial or other special services. The group receiving no services had a mean NCE score on the MAT6 reading total score of 58.4, while students served in a Chapter 1 Regular or a Chapter 1 Migrant reading program had mean NCE scores of 32.8 and 34.6 respectively. Fourth-grade results in mathematics were similar. The no service group had an average NCE score on the MAT6 mathematics total score of 54.6, while the Chapter 1 Regular and Chapter 1 Migrant students served in mathematics each had mean NCEs of 36.5.

Research Question 6. How does the performance of the multiply-served group differ from the singly-served groups?

Compared to Chapter 1 students receiving services in only one program, the students receiving multiple services generally scored somewhat lower in both reading and mathematics as measured by the MAT6. The exceptions were in the area of mathematics where the students receiving Chapter 1 Regular or Chapter 1 Migrant and Bilingual services scored about the same on the mathematics subtest as those students receiving only Chapter 1 Regular or Chapter 1 Migrant services. Performance for those students receiving Bilingual services in addition to Chapter 1 services was also more variable. Students receiving services in two or more Chapter 1 Migrant programs scored very similarly to the multiple services groups in reading at the fourth-grade level but in mathematics they scored slightly higher than the multiple services groups and looked more like the single service Chapter 1 groups.

At the eighth-grade level the results were similar. Students served only in a Chapter 1 Regular reading program had an average NCE score on the MAT6 reading test of 32.6 which was well below those students receiving no special or compensatory services (mean NCE of 58.0).

Table 11

NCE Status in Reading Achievement by Service Model

Code	Model	N	Mean	StDev	Median	25%ile	75%ile
-- Grade 4 --							
All	All Students	49,984	53.5	22.2	53.2	37.1	69.3
No	No Services	40,875	58.4	20.2	57.0	44.1	73.7
Cr	Chapter 1 Reading only	2,202	32.8	13.3	32.3	24.2	40.7
Cm	Chapter 1 Math only	650	42.4	15.0	41.3	32.8	52.1
Mr	Migrant Reading only	46	34.6	15.2	33.0	23.9	46.3
Mm	Migrant Math only	21	37.9	10.8	39.6	30.7	46.3
Rr	RAP Reading only	677	32.7	14.2	32.3	23.0	41.3
Rm	RAP Math only	745	43.5	15.6	43.0	33.0	52.1
B	Bilingual only	324	37.7	21.9	34.4	20.8	53.6
L	Learning Disabled only	1,643	21.5	14.5	18.9	10.4	29.9
H	Handicapped only	250	29.4	21.7	23.0	13.1	43.0
M2	Migrant 2 or more subjects	61	26.4	15.3	27.2	15.4	35.8
Crm	Chapter 1 Reading and Math	581	28.9	13.1	28.2	18.9	37.1
CrRm	Chapter 1 Reading and RAP Math	308	29.7	14.0	28.2	19.3	38.3
CS	Chapter 1 and Special Ed.	204	23.6	14.4	20.4	13.1	33.0
CB	Chapter 1 and Bilingual	90	23.3	12.1	24.2	15.4	30.1
MB	Migrant and Bilingual	30	22.0	15.4	21.7	6.7	32.5
-- Grade 8 --							
All	All Students	52,085	55.2	21.6	54.8	39.6	69.3
No	No Services	46,854	58.0	20.4	57.5	43.6	71.8
Cr	Chapter 1 Reading only	635	32.6	12.1	31.5	24.2	39.6
Cm	Chapter 1 Math only	248	42.5	16.2	41.3	31.5	50.5
Mr	Migrant Reading only	7	-	-	-	-	-
Mm	Migrant Math only	2	-	-	-	-	-
Rr	RAP Reading only	173	31.2	11.8	30.7	23.0	38.3
Rm	RAP Math only	287	43.4	17.4	40.1	30.7	54.8
B	Bilingual only	267	22.3	18.3	17.3	10.4	31.5
L	Learning Disabled only	1,894	26.5	14.3	24.2	15.4	34.4
H	Handicapped only	323	27.9	19.1	24.2	13.1	36.5
M2	Migrant 2 or more subjects	12	28.7	12.6	26.2	21.0	40.1
Crm	Chapter 1 Reading and Math	94	30.9	10.4	30.7	23.9	37.1
CrRm	Chapter 1 Reading and RAP Math	51	32.5	9.4	32.3	26.3	37.1
CS	Chapter 1 and Special Ed.	143	26.0	13.3	25.3	15.4	34.4
CB	Chapter 1 and Bilingual	31	18.6	12.6	15.4	10.4	27.2
MB	Migrant and Bilingual	21	18.5	8.6	20.4	8.6	25.6

Table 11
(Continued)

Code	Model	N	Mean	StDev	Median	25%ile	75%ile
-- Grade 10 --							
All	All Students	56,739	52.8	18.1	52.6	40.7	64.9
No	No Services	54,063	54.1	17.4	54.2	42.5	67.0
Cr	Chapter 1 Reading only	127	34.3	12.1	32.3	27.2	42.5
Cm	Chapter 1 Math only	42	40.1	13.9	36.2	29.9	47.9
Mr	Migrant Reading only	3	-	-	-	-	-
Mm	Migrant Math only	2	-	-	-	-	-
B	Bilingual only	291	21.5	15.2	17.3	13.1	27.2
L	Learning Disabled only	1,489	27.1	13.6	25.3	17.3	35.1
H	Handicapped only	293	23.2	16.7	18.9	11.8	32.7
M2	Migrant 2 or more subjects	19	33.8	13.2	33.0	25.3	40.1
Crm	Chapter 1 Reading and Math	13	29.0	11.1	27.2	23.6	33.2
CS	Chapter 1 and Special Ed.	29	25.2	14.0	18.9	15.4	39.2
CB	Chapter 1 and Bilingual	4	-	-	-	-	-
MB	Migrant and Bilingual	25	28.6	10.9	29.1	22.9	33.7

Note - Data are not reported for models with less than 10 students. RAP is not offered at Grade 10.

Source: 1985 Washington State Assessment

FIGURE 3

Status in Reading by Service Model

Grade 4 Students

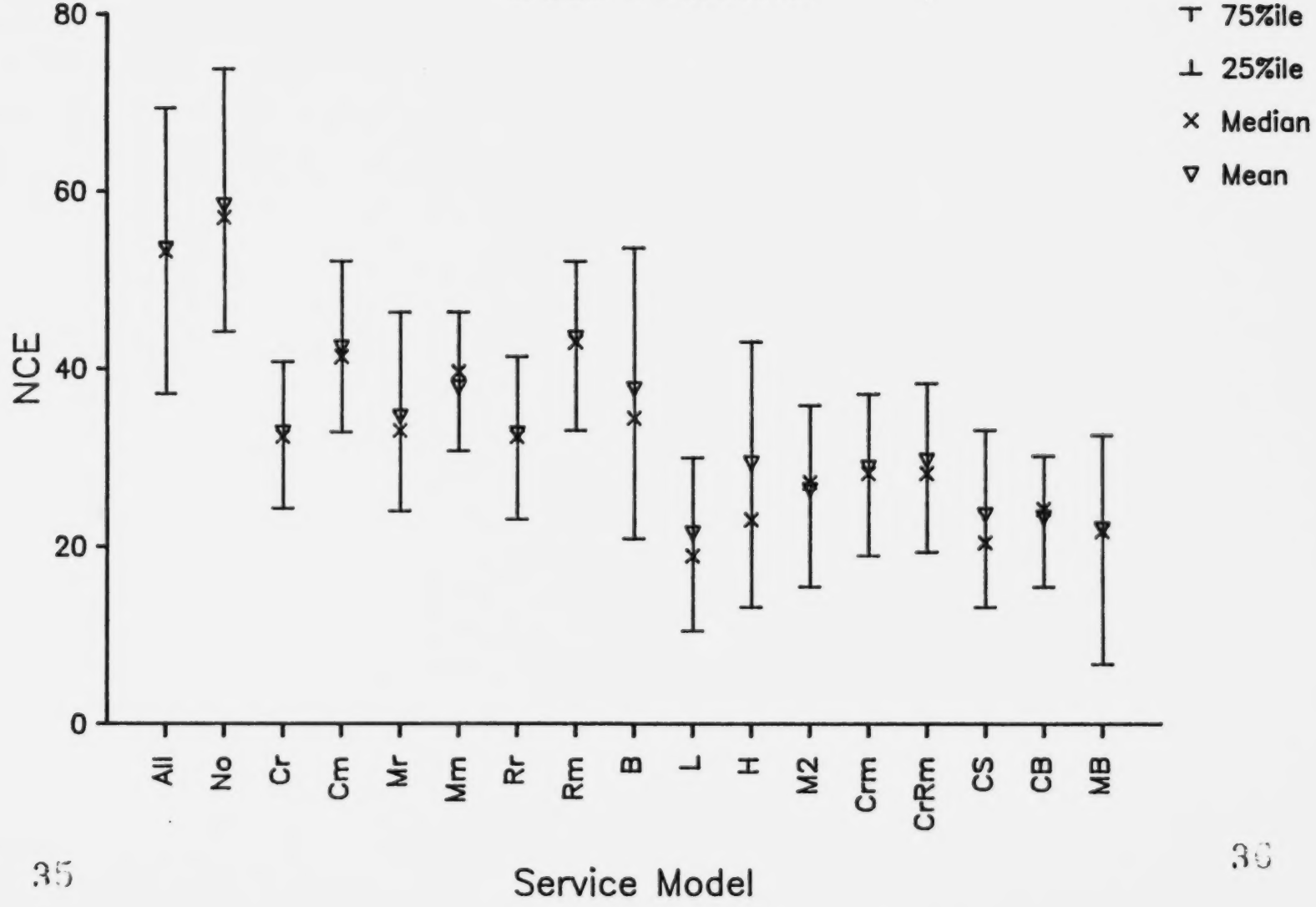


FIGURE 4

Status in Reading by Service Model

Grade 8 Students

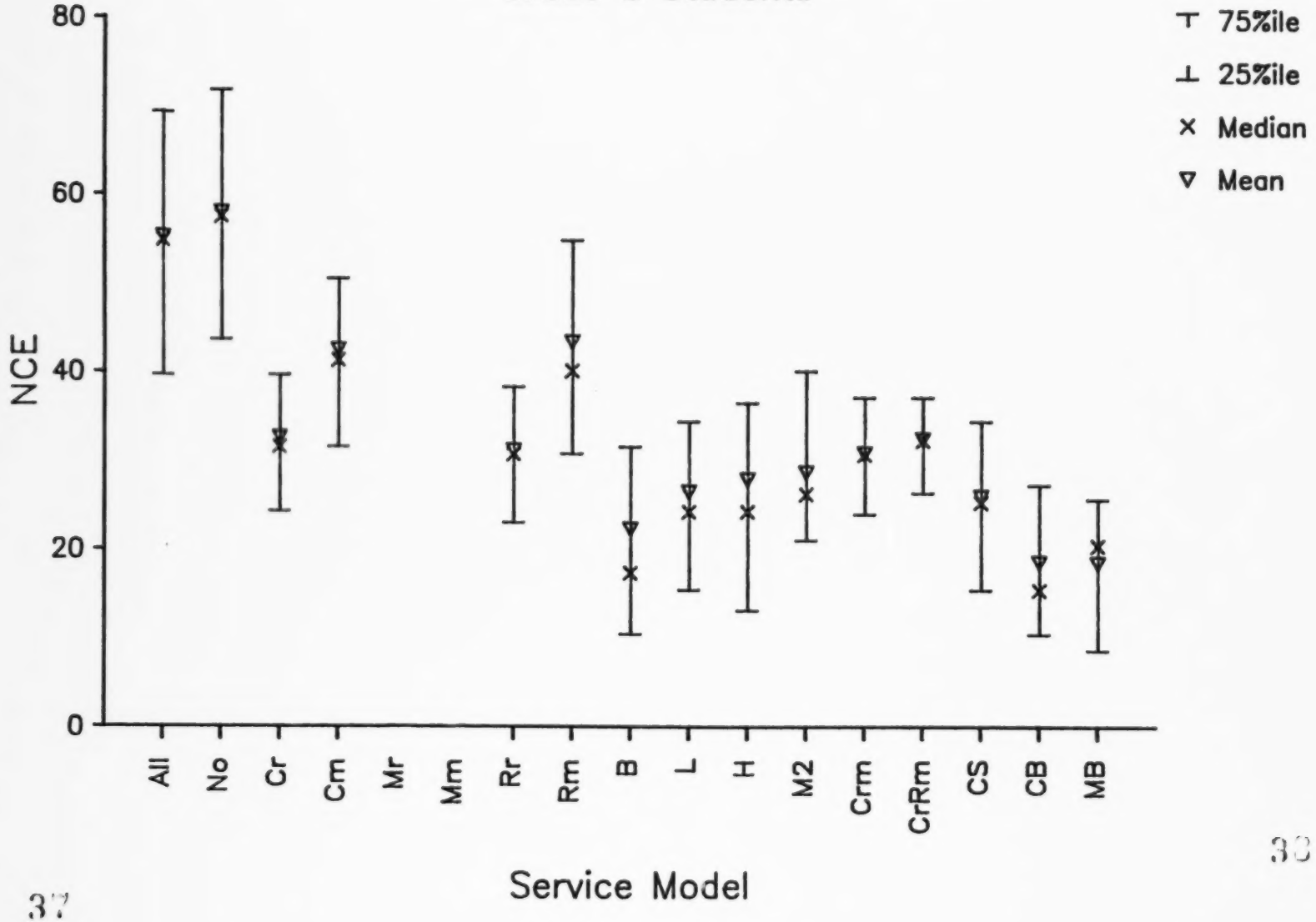


FIGURE 5

Status in Reading by Service Model

Grade 10 Students

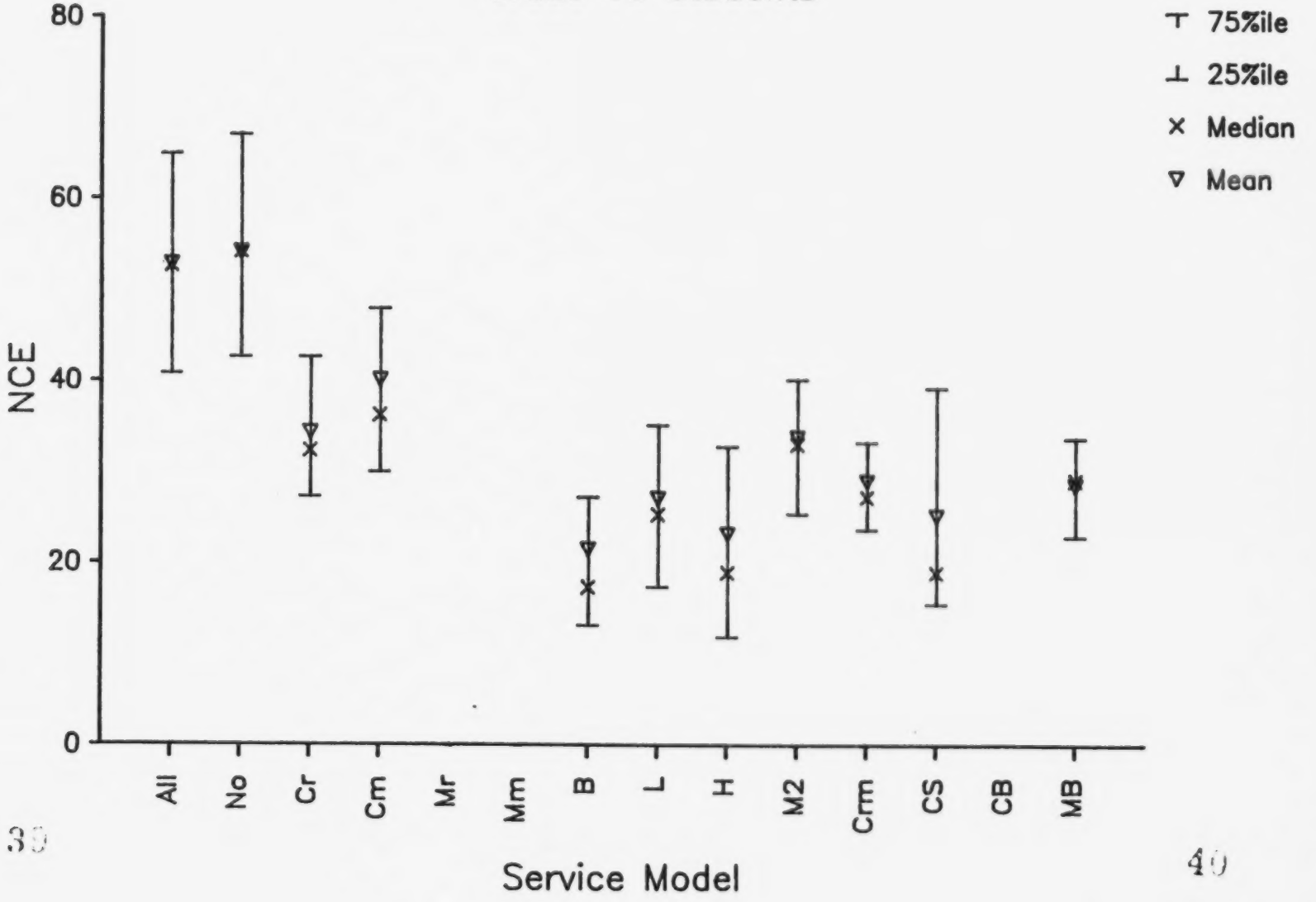


Table 12

NCE Status in Math Achievement by Service Model

Code	Model	N	Mean	StDev	Median	25%ile	75%ile
-- Grade 4 --							
All	All Students	50,029	50.8	19.2	50.5	38.3	62.9
No	No Services	40,909	54.6	17.7	54.2	43.0	66.3
Cr	Chapter 1 Reading only	2,199	37.7	14.6	38.3	27.2	47.4
Cm	Chapter 1 Math only	645	36.5	12.7	37.1	28.2	44.1
Mr	Migrant Reading only	47	37.7	13.6	39.6	28.2	46.3
Mm	Migrant Math only	21	36.5	12.3	35.8	26.8	46.8
Rr	RAP Reading only	673	37.9	14.9	39.6	28.2	48.4
Rm	RAP Math only	747	37.1	13.2	37.1	27.2	46.3
B	Bilingual only	323	47.8	20.2	48.4	35.8	61.7
L	Learning Disabled only	1,645	24.7	15.3	23.0	13.1	35.8
H	Handicapped only	250	27.7	20.2	25.3	12.4	41.9
M2	Migrant 2 or more subjects	59	34.6	15.2	35.8	23.0	45.2
Crm	Chapter 1 Reading and Math	589	30.9	13.3	29.9	21.8	39.6
CrRm	Chapter 1 Reading and RAP Math	312	31.5	13.7	31.5	23.0	40.7
CS	Chapter 1 and Special Ed.	204	27.1	14.5	27.2	17.3	37.1
CB	Chapter 1 and Bilingual	90	35.1	15.9	33.0	22.7	45.5
MB	Migrant and Bilingual	36	33.5	17.5	37.7	17.7	47.1
-- Grade 8 --							
All	All Students	51,956	52.6	21.5	51.1	38.3	67.7
No	No Services	46,723	55.2	20.5	53.7	40.1	69.3
Cr	Chapter 1 Reading only	643	35.3	12.9	34.4	26.3	42.5
Cm	Chapter 1 Math only	245	32.5	13.5	31.5	24.2	40.1
Mr	Migrant Reading only	7	-	-	-	-	-
Mm	Migrant Math only	2	-	-	-	-	-
Rr	RAP Reading only	182	33.1	13.1	31.5	25.3	40.4
Rm	RAP Math only	289	32.6	13.9	32.3	23.0	40.1
B	Bilingual only	263	40.6	20.9	37.1	25.3	55.9
L	Learning Disabled only	1,883	24.6	14.7	23.0	13.1	33.7
H	Handicapped only	324	24.0	18.0	21.8	10.4	34.4
M2	Migrant 2 or more subjects	12	36.8	17.3	31.5	25.8	39.3
Crm	Chapter 1 Reading and Math	95	28.0	11.8	27.2	20.4	32.3
CrRm	Chapter 1 Reading and RAP Math	50	27.6	11.0	26.3	20.0	36.1
CS	Chapter 1 and Special Ed.	143	24.2	13.1	23.0	15.4	33.7
CB	Chapter 1 and Bilingual	29	34.6	20.0	29.1	24.1	43.2
MB	Migrant and Bilingual	21	23.1	10.5	21.8	14.3	31.5

Table 12
(Continued)

Code	Model	N	Mean	StDev	Median	25%ile	75%ile
— Grade 10 —							
All	All Students	57,268	53.6	20.0	56.6	40.1	67.7
No	No Services	54,504	54.8	19.4	54.2	41.3	67.7
Cr	Chapter 1 Reading only	133	34.8	17.5	35.1	21.8	43.9
Cm	Chapter 1 Math only	42	34.5	15.9	29.1	24.2	42.8
Mr	Migrant Reading only	4	-	-	-	-	-
Mm	Migrant Math only	2	-	-	-	-	-
B	Bilingual only	317	40.6	19.9	40.1	26.3	54.2
L	Learning Disabled only	1,541	27.2	14.4	26.3	18.9	35.1
H	Handicapped only	293	23.7	16.1	21.8	13.1	33.7
M2	Migrant 2 or more subjects	20	35.4	11.6	34.4	31.1	41.0
Crm	Chapter 1 Reading and Math	13	32.3	10.8	33.7	21.8	41.3
CS	Chapter 1 and Special Ed.	34	25.4	13.7	24.2	18.5	33.7
CB	Chapter 1 and Bilingual	4	-	-	-	-	-
MB	Migrant and Bilingual	25	32.6	10.0	32.3	25.3	39.2

Note - Data are not reported for models with less than 10 students. RAP is not offered at Grade 10.

Source: 1985 Washington State Assessment

FIGURE 6

Status in Math by Service Model

Grade 4 Students

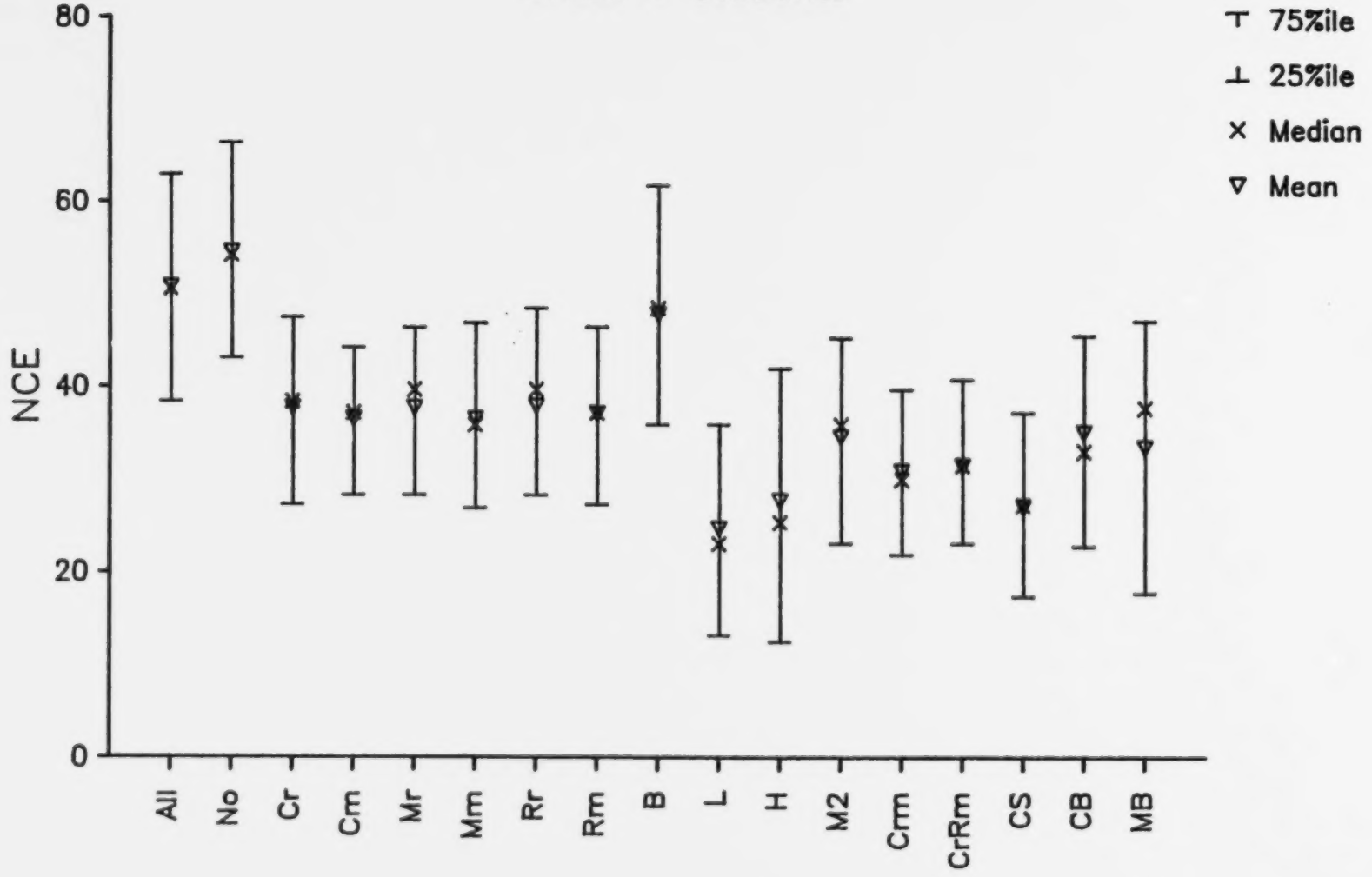


FIGURE 7

Status in Math by Service Model

Grade 8 Students

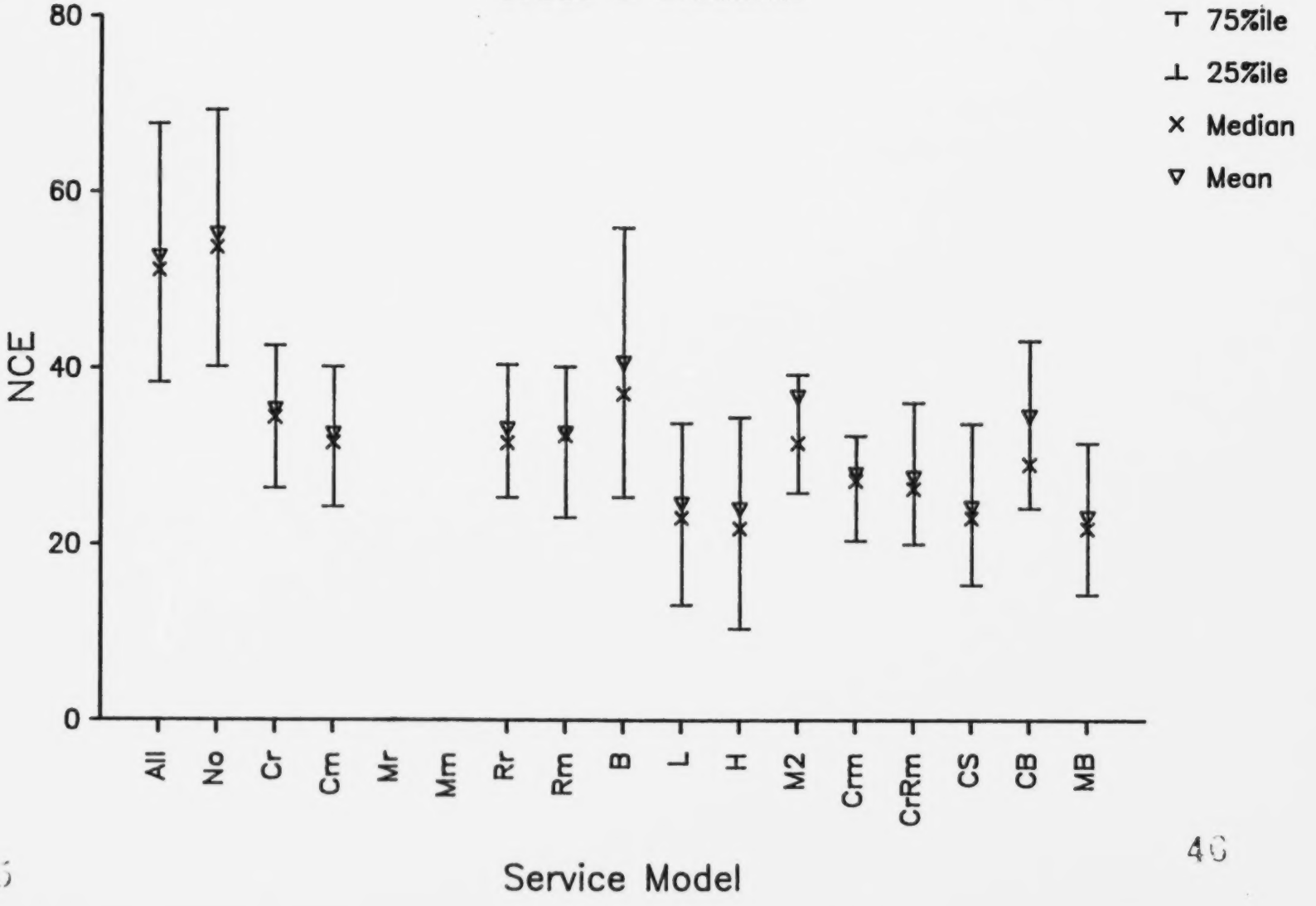
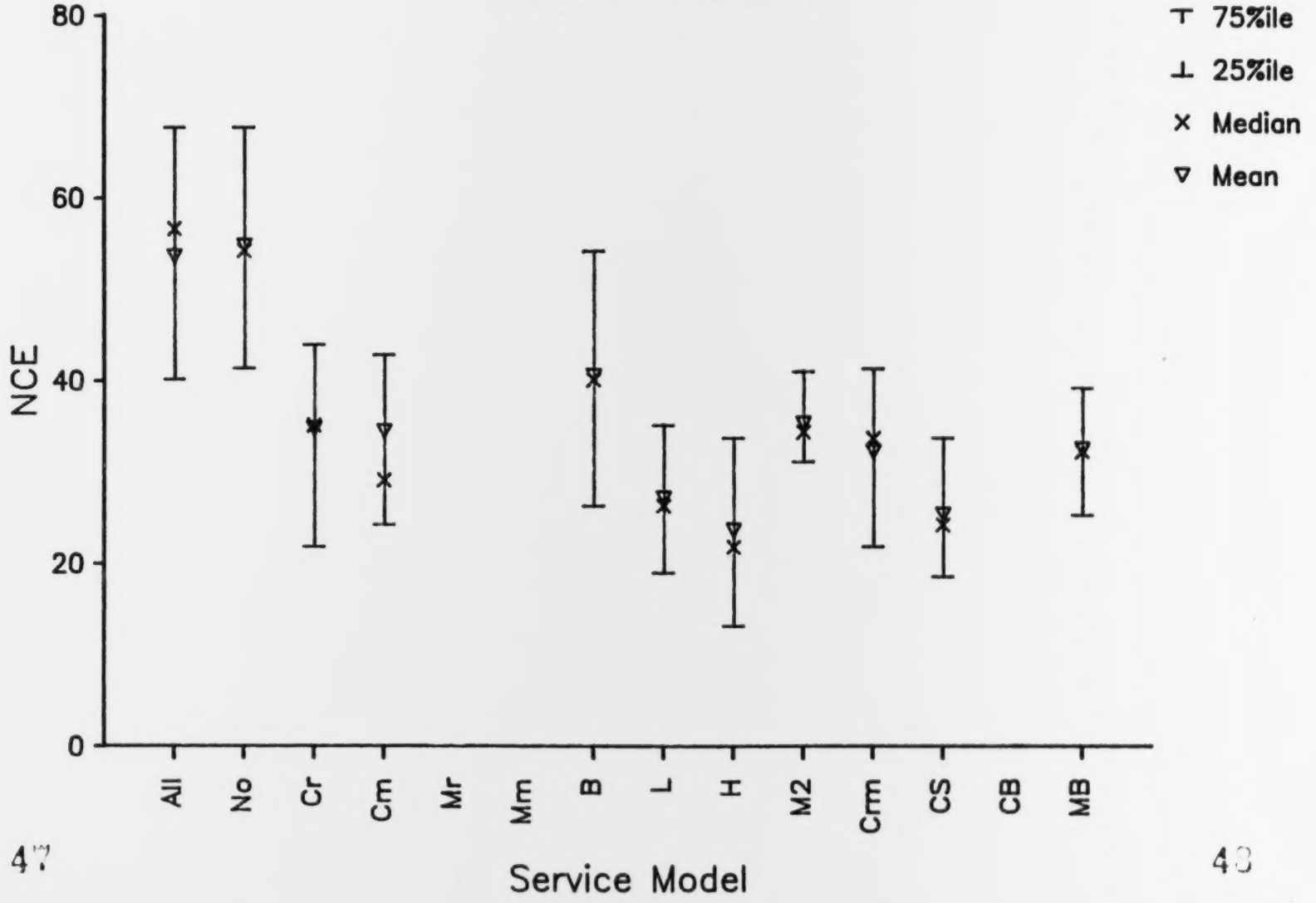


FIGURE 8

Status in Math by Service Model

Grade 10 Students



Students receiving, in addition to Chapter 1 reading services, compensatory mathematics services through either Chapter 1 or the state Remediation Program scored about the same as those students receiving only a single service. As was true at the fourth-grade level, eighth-grade students served in Chapter 1, who were also served in a Special Education or a Bilingual education program , scored the lowest in reading. The pattern is slightly different for eighth-grade mathematics performance. While those students served only in a Chapter 1 Regular mathematics program clearly scored lower than eighth graders receiving no services (mean NCEs of 32.5 and 55.2 respectively), only the students served in both a Chapter 1 Regular program and in special education performed lower than those students receiving only a single service.
For the small number of students tested by Chapter 1 at the tenth grade, fewer comparisons were available. Among those analyzed, the following patterns emerged. Like the findings at the fourth- and eighth-grade levels, those students receiving only a single compensatory service in either reading or mathematics scored considerably lower than those students receiving no services. Among those groups receiving multiple services, only the Chapter 1 students who were also in a special education program scored clearly lower in reading and mathematics than did the single service Chapter 1 students.

In general, the achievement scores of students in combined program categories are lower than the students who are served in a single program and far lower than the student who receives no special services. This holds true for grades 4, 8 and 10 in both reading and mathematics.

4.2.1 Student Perception of Achievement and Need for Help

An analysis of student questionnaire data provided another view of the achievement of special programs children, this time through the eyes of the students themselves. Students were asked to rate their own abilities in reading and in math. In other questions they were asked if they needed help in reading or math.

Student perceptions of their own reading ability are summarized in Table 13 and Figures 9, 10 and 11. Perceptions of their math ability are summarized in Table 14 and Figures 12, 13 and 14.

Research Question 7. How do the singly-served, multiply-served, and non-served children differ in their self-perceived reading ability?

Surprisingly, most of the special programs children, regardless of the number of services they received or their actual reading scores, felt that they were good or very good readers. This was evident in grades 4, 8 and 10. Greater percentages of students served in special reading programs, however, felt that they were poor readers. In grade 4 for example, only 4 percent of the non-served students classified themselves as poor readers. The single service group served in reading ranged from 15-25 percent. The multiply-served groups ranged from 14-26 percent rating themselves as poor readers.

Table 13
Student Perception of Reading Ability

Code	Model	Poor Reader	Good Reader	Very Good Reader	Need Help: Yes	Need Help: None	Need Help: Some	Need Help: A Lot
-- Grade 4 --								
All	All Students	6.3%	55.7%	38.0%	23.8%			
No	No Services	3.9	54.1	42.0	18.8			
Cr	Chapter 1 Reading only	16.8	67.4	15.8	48.3			
Cm	Chapter 1 Math only	5.9	58.4	35.7	26.8			
Mr	Migrant Reading only	22.9	56.3	20.8	43.8			
Mm	Migrant Math only	10.0	70.0	20.0	35.0			
Rr	RAP Reading only	15.7	65.1	19.2	45.1			
Rm	RAP Math only	6.9	60.4	32.7	26.8			
B	Bilingual only	16.2	60.0	23.8	40.9			
L	Learning Disabled only	24.9	56.2	18.9	55.6			
H	Handicapped only	15.3	47.1	37.6	40.2			
M2	Migrant 2 or more subjects	25.0	59.4	15.6	50.0			
Crm	Chapter 1 Reading and Math	14.5	67.9	17.6	45.4			
CrRm	Chapter 1 Reading and RAP Math	13.7	71.4	14.9	46.9			
CS	Chapter 1 and Special Education	22.4	61.2	16.4	55.9			
CB	Chapter 1 and Bilingual	18.8	69.8	11.4	55.2			
MB	Migrant and Bilingual	26.3	39.5	34.2	59.0			
-- Grade 8								
All	All Students	9.2	63.5	27.3	62.2	34.3	3.5	
No	No Services	7.3	63.3	29.4	65.8	31.7	2.5	
Cr	Chapter 1 Reading only	27.4	67.0	5.6	24.9	63.3	11.8	
Cm	Chapter 1 Math only	9.5	71.8	18.7	57.7	38.6	3.7	
Mr	Migrant Reading only	-	-	-	-	-	-	
Mm	Migrant Math only	-	-	-	-	-	-	
Rr	RAP Reading only	24.0	70.4	5.6	31.2	57.1	11.7	
Rm	RAP Math only	15.2	68.9	15.9	55.9	39.3	4.8	
B	Bilingual only	28.8	59.9	11.3	20.4	55.1	24.5	
L	Learning Disabled only	28.9	63.2	7.9	24.3	60.2	15.5	
H	Handicapped only	17.4	63.6	19.0	30.4	52.2	17.4	
M2	Migrant 2 or more subjects	26.7	66.7	6.6	13.3	86.7	.0	
Crm	Chapter 1 Reading and Math	25.3	63.6	11.1	35.4	56.3	8.3	
CrRm	Chapter 1 Reading and RAP Math	17.5	73.7	8.8	34.0	58.0	8.0	
CS	Chapter 1 and Special Education	37.0	54.8	8.2	23.2	64.5	12.3	
CB	Chapter 1 and Bilingual	45.2	45.2	9.6	7.1	46.4	46.5	
MB	Migrant and Bilingual	36.4	59.1	4.5	9.5	85.7	4.8	

Table 13
(Continued)

Code	Model	Poor Reader	Good Reader	Very Good Reader	Need Help: None	Need Help: Some	Need Help: A Lot
— Grade 10 —							
All	All Students	10.8%	60.9%	28.3%	68.1%	28.0%	3.9%
No	No Services	9.6	61.1	29.3	70.0	26.7	3.3
Cr	Chapter 1 Reading only	29.0	61.7	9.3	30.1	59.6	10.3
Cm	Chapter 1 Math only	10.9	65.2	23.9	51.1	44.4	4.5
Mr	Migrant Reading only						
Mm	Migrant Math only						
B	Bilingual only	44.9	48.5	6.6	14.8	56.0	29.2
L	Learning Disabled only	33.8	57.9	8.3	31.8	52.4	15.8
H	Handicapped only	25.9	54.6	19.5	32.3	49.4	18.3
M2	Migrant 2 or more subjects	18.2	77.3	4.5	22.7	72.7	4.6
Crm	Chapter 1 Reading and Math	7.7	92.3	.0	38.5	46.2	15.3
CS	Chapter 1 and Special Education	34.4	53.1	12.5	32.3	51.6	16.1
CB	Chapter 1 and Bilingual	14.3	85.7	.0	14.3	71.4	14.3
MB	Migrant and Bilingual	29.6	66.7	3.7	26.9	65.4	7.7

Note - Data are not reported for models with less than 10 students. RAP is not offered at Grade 10.

Source: 1985 Washington State Assessment

FIGURE 9

Perception of Reading Ability

Grade 4 Students

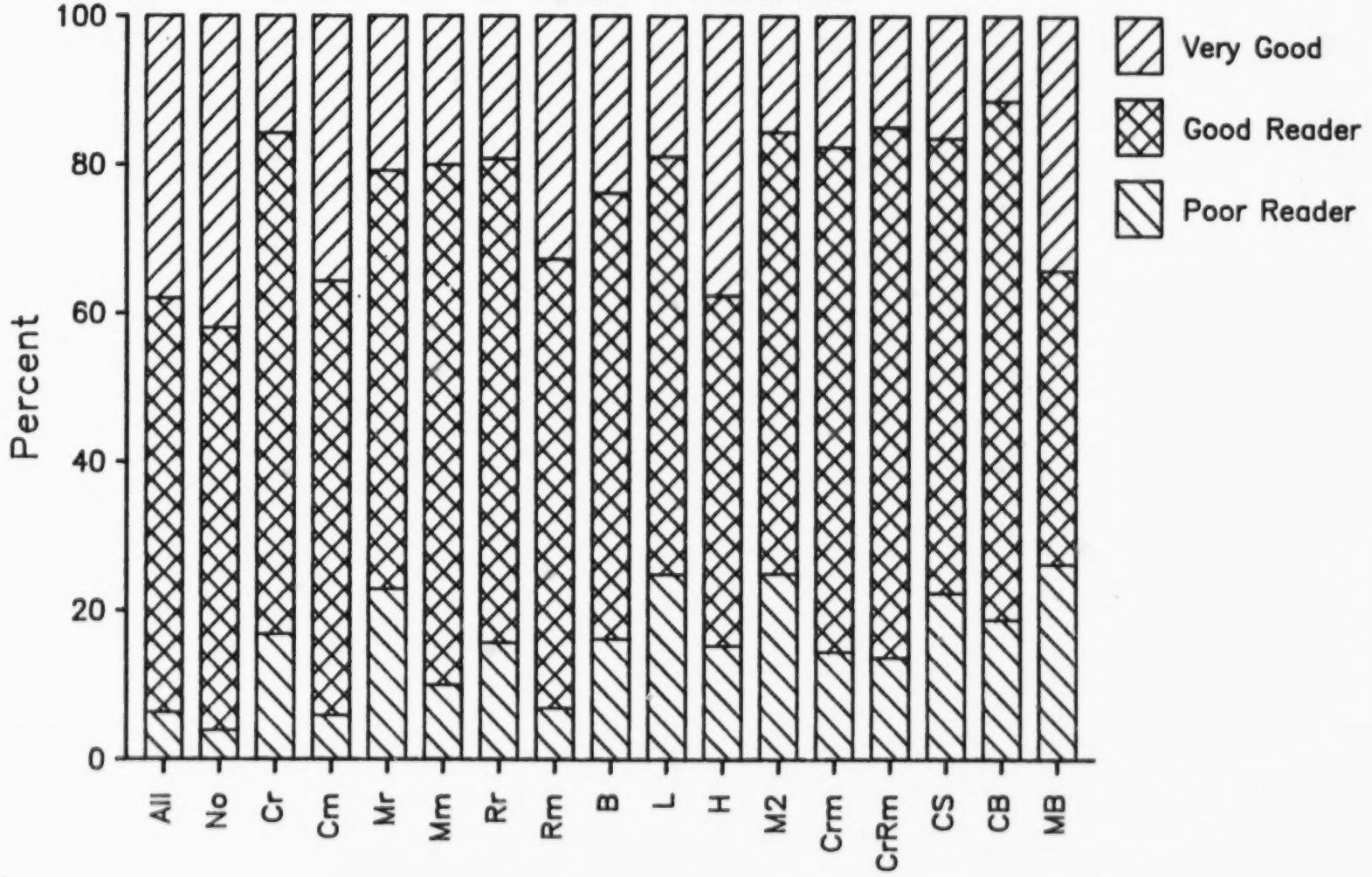


FIGURE 10

Perception of Reading Ability

Grade 8 Students

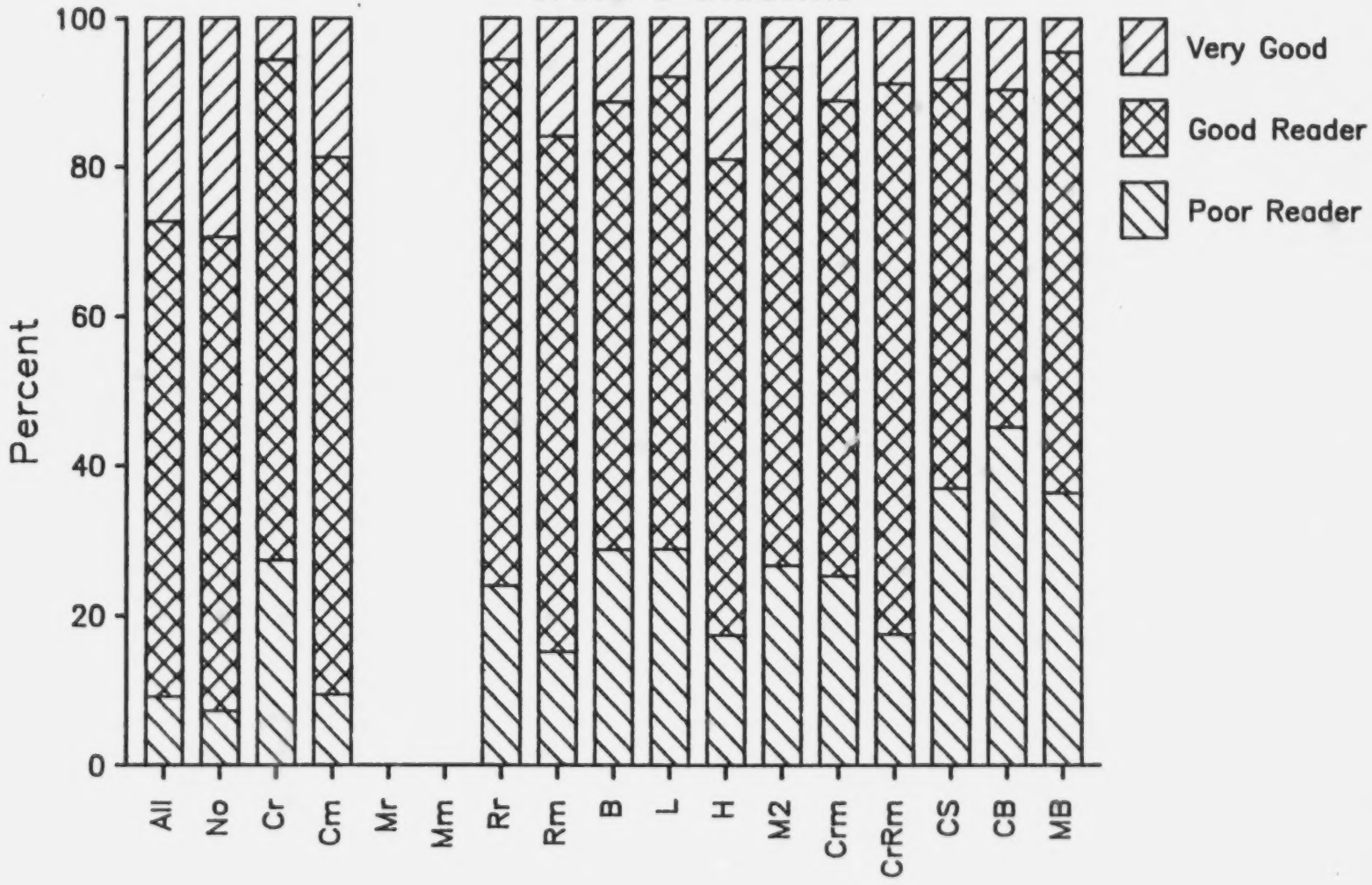


FIGURE 11

Perception of Reading Ability

Grade 10 Students

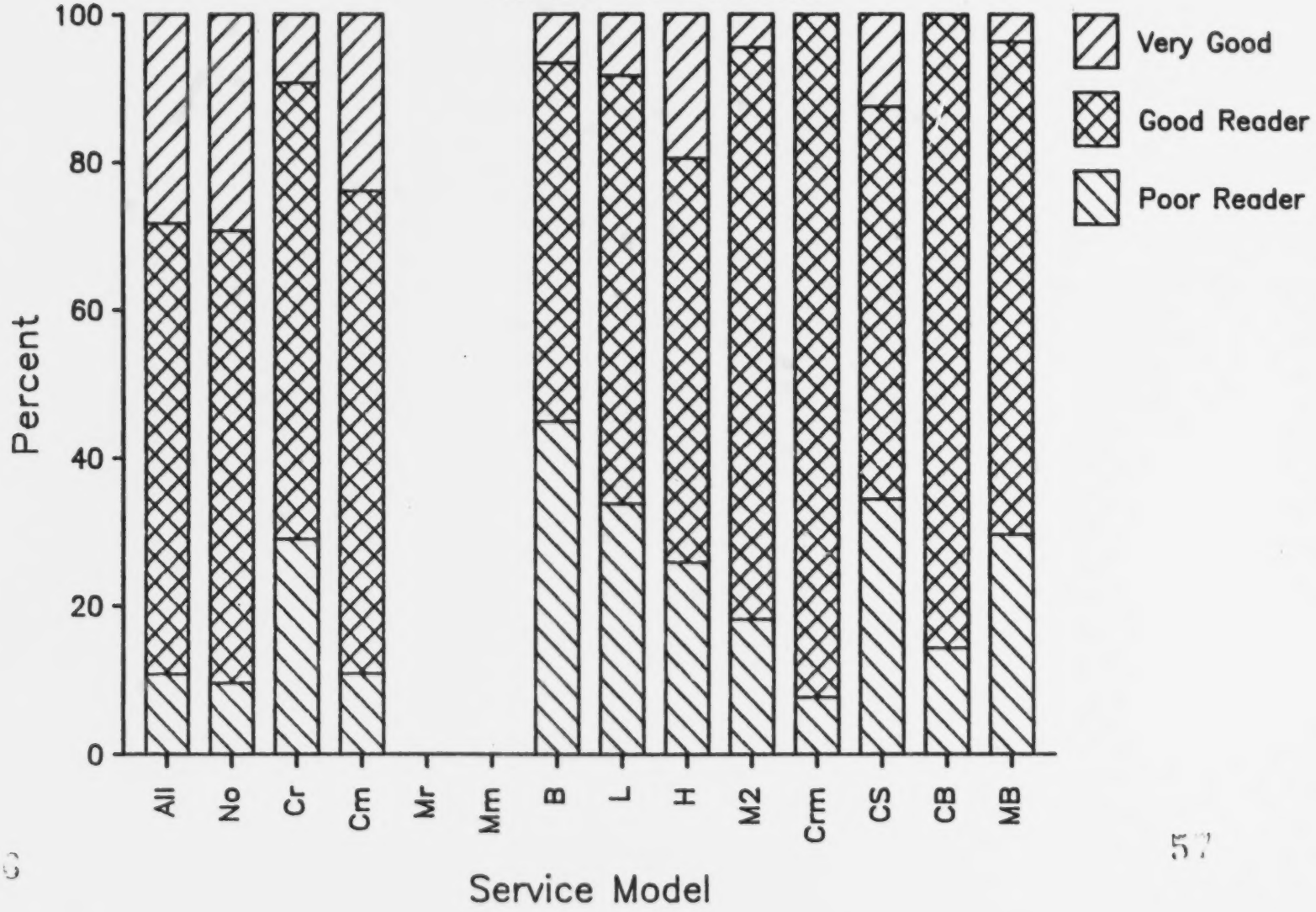


Table 14

Student Perception of Math Achievement

Code	Model	Poor in Math	Good in Math	Very Good in Math	Need Help: None	Need Help: Some	Need Help: A Lot
-- Grade 4 --							
All	All Students	8.5%	60.1%	31.4%	33.1%		
No	No Services	7.1	60.1	32.8	30.8		
Cr	Chapter 1 Reading only	10.5	58.7	30.8	34.9		
Cm	Chapter 1 Math only	20.7	66.4	12.9	56.0		
Mr	Migrant Reading only	10.4	72.9	16.7	40.4		
Mm	Migrant Math only	15.0	55.0	30.0	40.0		
Rr	RAP Reading only	8.7	58.4	32.9	34.1		
Rm	RAP Math only	23.3	62.9	13.8	51.4		
B	Bilingual only	10.3	57.8	31.9	31.4		
L	Learning Disabled only	16.1	56.3	27.6	44.9		
H	Handicapped only	11.9	58.1	30.0	46.5		
M2	Migrant 2 or more subjects	14.1	57.8	28.1	35.9		
Crm	Chapter 1 Reading and Math	13.4	65.8	20.8	48.5		
CrRm	Chapter 1 Reading and RAP Math	15.6	62.3	22.1	49.8		
CS	Chapter 1 and Special Education	15.9	64.0	20.1	46.7		
CB	Chapter 1 and Bilingual	14.4	58.8	26.8	41.7		
MB	Migrant and Bilingual	13.2	50.0	36.8	30.8		
					None	Some	A Lot
-- Grade 8 --							
All	All Students	11.4	67.0	21.6	35.7	53.5	10.8
No	No Services	9.9	67.2	22.9	37.2	53.2	9.6
Cr	Chapter 1 Reading only	17.8	70.0	12.2	31.1	55.2	13.7
Cm	Chapter 1 Math only	34.7	58.4	6.9	15.0	56.9	28.1
Mr	Migrant Reading only						
Mm	Migrant Math only						
Rr	RAP Reading only	16.8	73.5	9.7	30.0	54.7	15.3
Rm	RAP Math only	30.7	65.0	4.3	15.8	59.7	24.5
B	Bilingual only	15.5	63.7	20.8	20.5	55.6	23.9
L	Learning Disabled only	26.8	63.5	9.7	21.1	55.7	23.2
H	Handicapped only	21.9	65.4	12.7	16.9	58.7	24.4
M2	Migrant 2 or more subjects	13.3	73.3	13.4	26.7	46.7	26.6
Crm	Chapter 1 Reading and Math	28.3	66.7	5.0	13.1	59.6	27.3
CrRm	Chapter 1 Reading and RAP Math	28.1	66.7	5.2	9.4	62.3	28.3
CS	Chapter 1 and Special Education	29.3	66.0	4.7	18.6	62.9	18.5
CB	Chapter 1 and Bilingual	3.2	77.4	19.4	19.4	67.7	12.9
MB	Migrant and Bilingual	13.6	86.4	.0	30.0	55.0	15.0

Table 14
(Continued)

Code	Model	Poor in Math	Good in Math	Very Good in Math	Need Help: None	Need Help: Some	Need Help: A Lot
— Grade 10 —							
All	All Students	16.6%	65.0%	18.4%	33.6%	52.8%	13.6%
No	No Services	15.9	65.2	18.9	34.3	52.6	13.1
Cr	Chapter 1 Reading only	20.4	67.9	11.7	23.4	55.8	20.8
Cm	Chapter 1 Math only	37.0	60.9	2.1	11.4	59.1	29.5
Mr	Migrant Reading only						
Mm	Migrant Math only						
B	Bilingual only	20.4	68.3	11.3	12.6	64.2	23.2
L	Learning Disabled only	31.9	62.1	6.0	22.2	56.9	20.9
H	Handicapped only	34.0	56.8	9.2	18.1	51.4	30.5
M2	Migrant 2 or more subjects	18.2	81.8	.0	27.3	50.0	22.7
Crm	Chapter 1 Reading and Math	30.8	69.2	.0	23.1	69.2	7.7
CS	Chapter 1 and Special Education	25.0	71.9	3.1	6.5	71.0	22.5
CB	Chapter 1 and Bilingual	42.9	42.9	14.2	28.6	28.6	42.8
MB	Migrant and Bilingual	11.1	85.2	3.7	37.0	51.9	11.1

Note - Data are not reported for models with less than 10 students. RAP is not offered at Grade 10.

Source: 1985 Washington State Assessment

FIGURE 12

Perception of Math Ability

Grade 4 Students

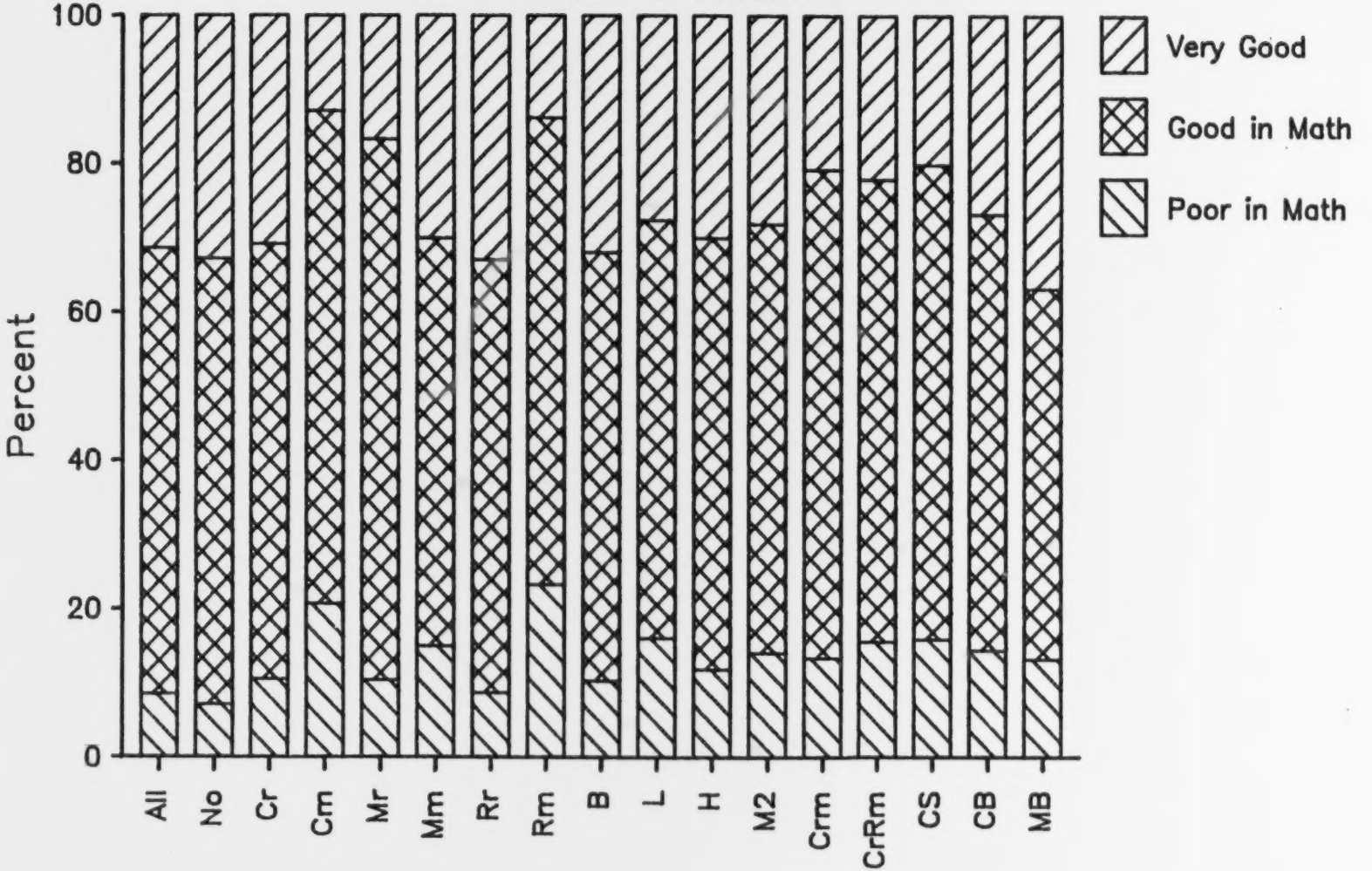


FIGURE 13

Perception of Math Ability

Grade 8 Students

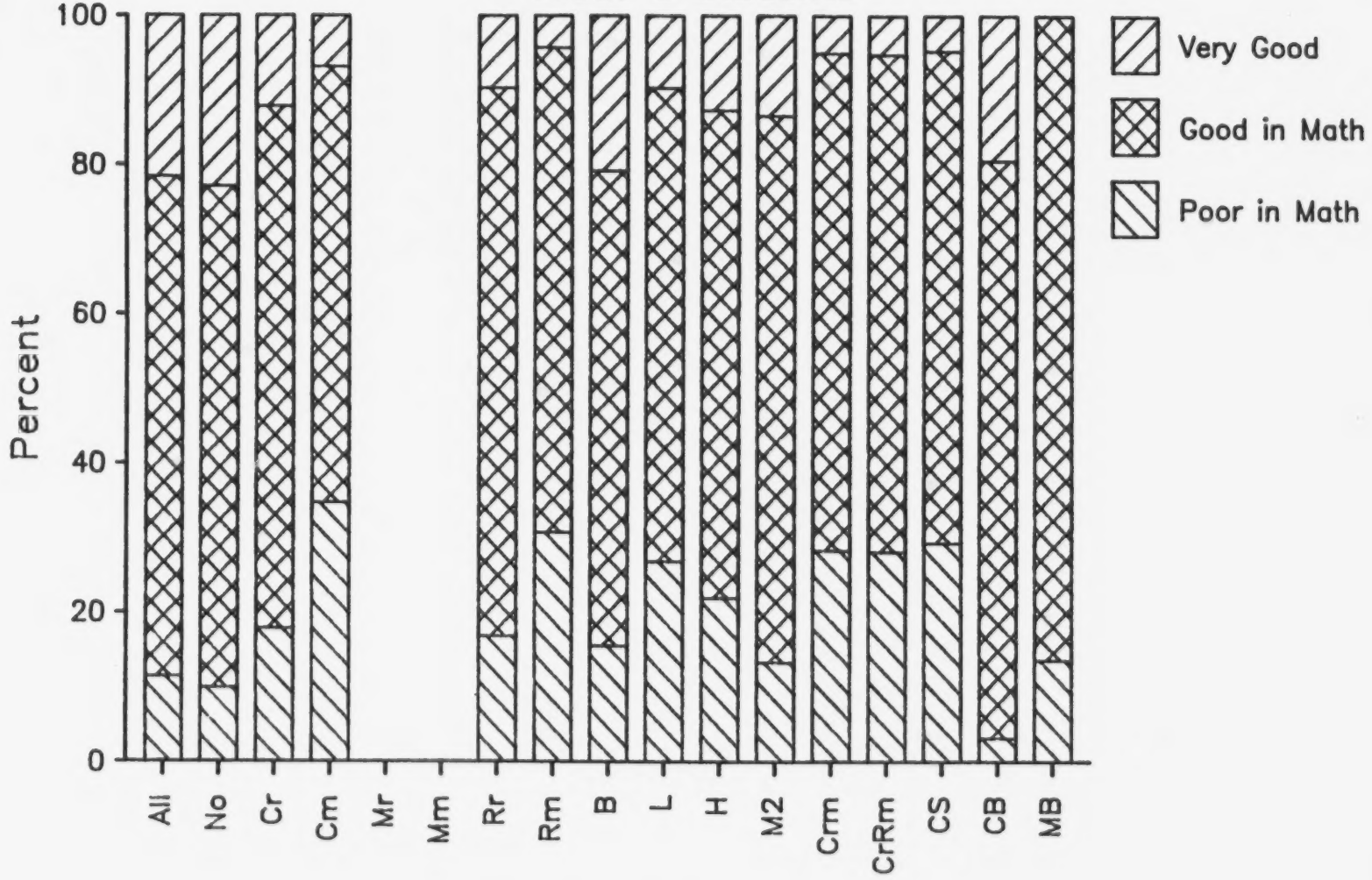
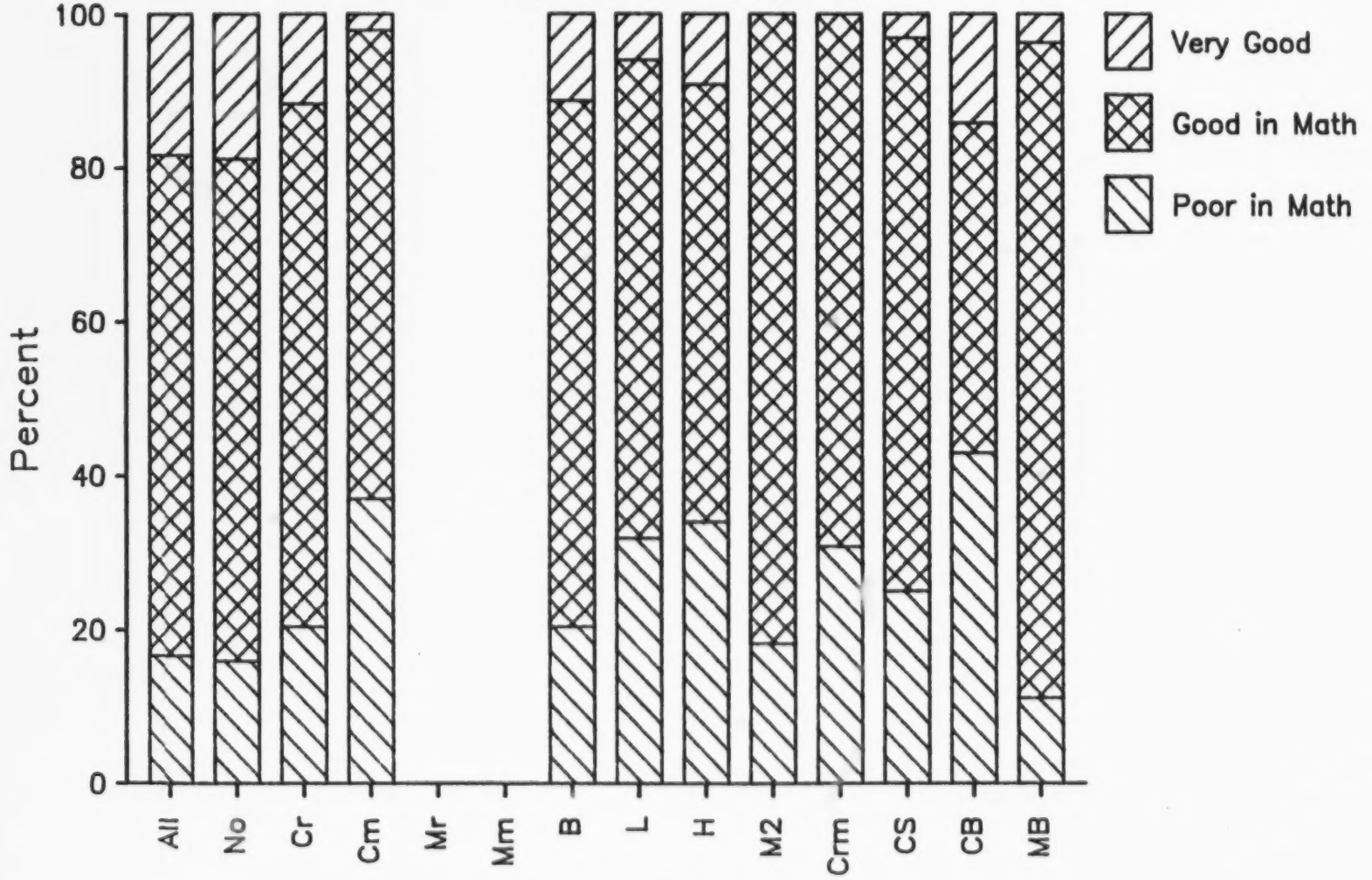


FIGURE 14

Perception of Math Ability

Grade 10 Students



The percentage of children who rate themselves as poor readers increases by grade. This increase is slight for the average and non-served, and much greater in the special programs categories. For example, in the Chapter 1 Regular fourth-grade group, 17 percent perceive themselves as poor readers. Twenty-seven percent of Chapter 1 Regular eighth-graders rate themselves as poor readers. By tenth-grade, 29 percent of the Chapter 1 group perceive themselves as poor readers. The highest percentage of self-rated poor readers, just over 45 percent, was in the grade 8 Chapter 1 and Bilingual group.

Research Question 8. Do singly-, multiply- and non-served children differ in their self-assessment of needing help in reading?

Generally, the answer is yes. At grade 4, 18 percent of the non-served students indicated they needed help. The singly-served groups ranged from 26 to 55 percent indicating that help was desired. The multiply-served student groups ranged from 45 to 59 percent indicating help was needed.

The grade 8 and 10 questions were phrased in terms of degree of help needed (i.e. none, some, or a lot). At grade 8, 66 percent of the non-served students felt no need for help in reading. The single service groups who were served in a reading program ranged from 25 to 31 percent indicating no help was needed. The multiply-served group ranged from 13 to 35 percent indicating no additional help was needed. In general, the multiply-served children, especially those receiving bilingual services, perceived a need for additional help in reading.

Research Question 9. How do the singly-served, multiply-served, and non-served children differ in their self-perceived math ability?

Like self perceptions of reading ability, students, in general, perceived themselves to be better math performers than test scores indicate their performance to be. At the 4th grade level, only 7 percent of the non-served group saw themselves as poor performers. There were mixed differences in the percentages of singly- and multiply-served students perception for need for help. Overall, however, the percentage of students reporting poor performance was one and one-half to twice as high as the non-served. Like reading, the self-perception of poor performance in mathematics increases in all groups in grades 8 and 10.

Research Question 10. Do singly-, multiply- and non-served children differ in their self assessment of needing help in mathematics?

At grade 4, the Chapter 1 math student knows he or she needs help in math. Fifty-six percent of these children indicate a need for help. Only 31 percent of non-served children list a need for assistance. Generally, the multiply-served child indicates a greater need for math help than does the singly-served 4th grader.

When degree is introduced into the question at grades 8 and 10, there is less of a distinction between the groups. It is safe to say that the served student groups see a greater degree of need for math help than the average or the non-served student in both grades. The Chapter 1/Special Education high school student group perceives the greatest need for math assistance (94%).

FIGURE 15

Need Help in Reading

Grade 4 Students

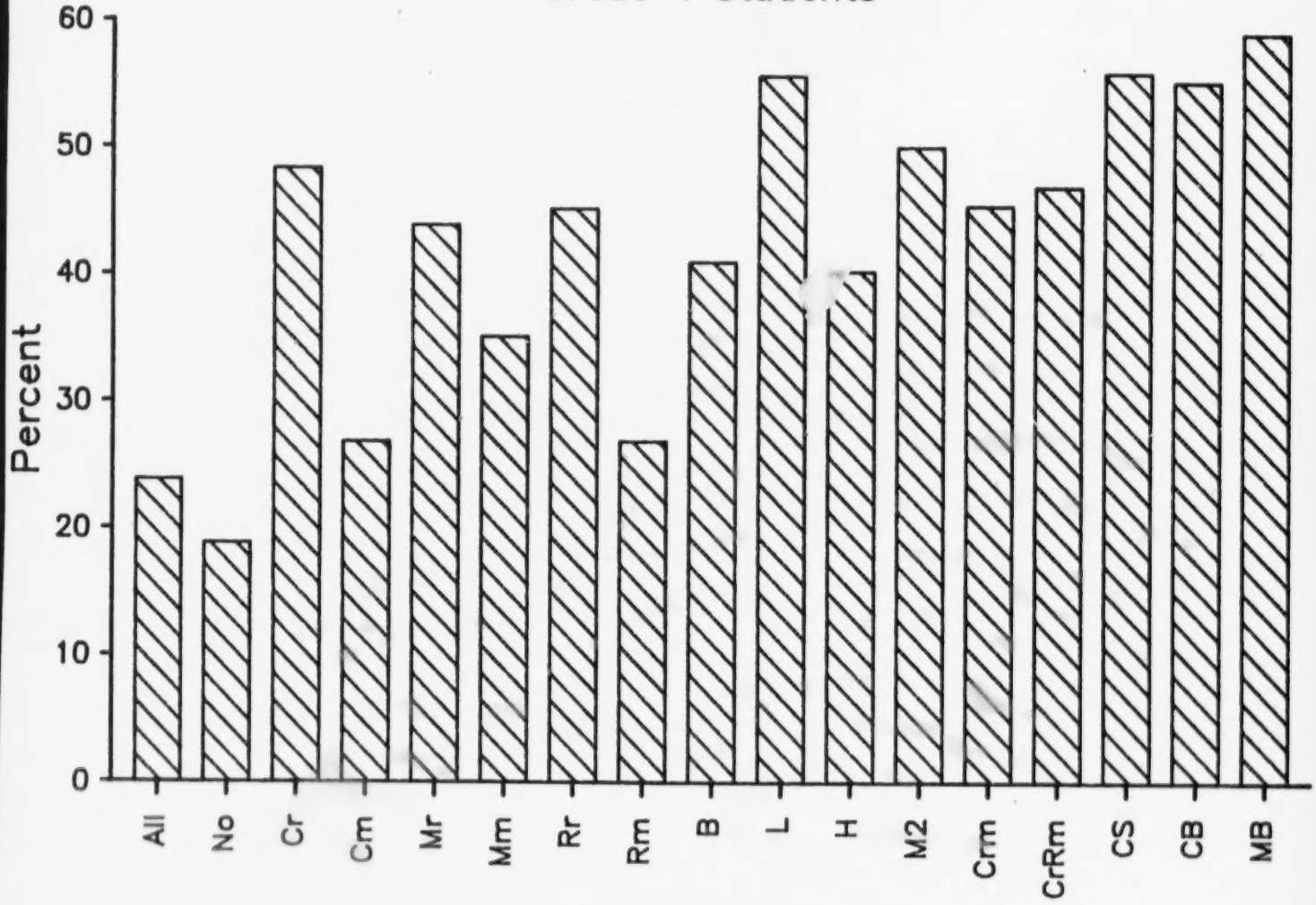


FIGURE 16

Need Help in Reading

Grade 8 Students

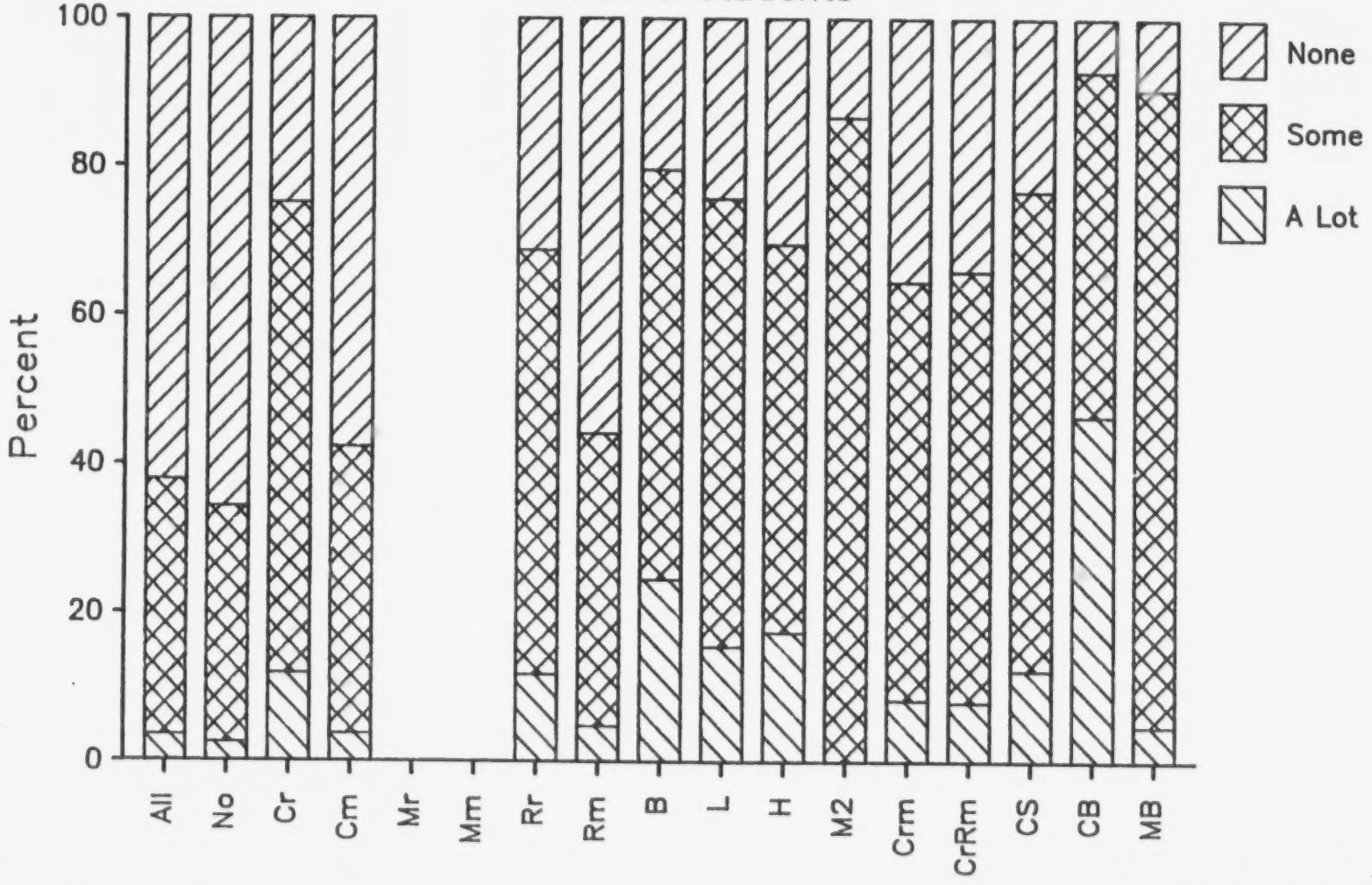


FIGURE 17

Need Help in Reading

Grade 10 Students

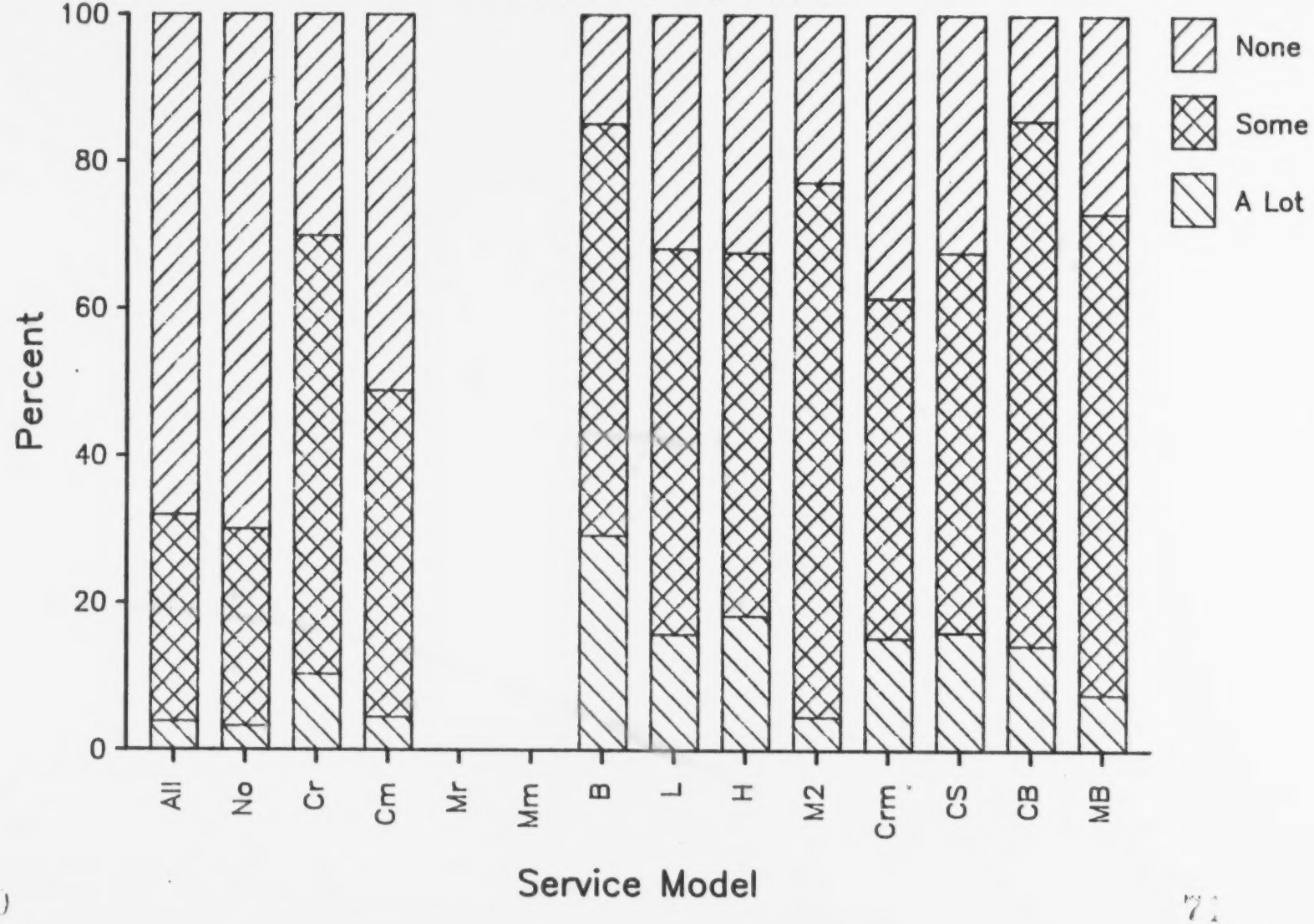


FIGURE 18

Need Help in Math

Grade 4 Students

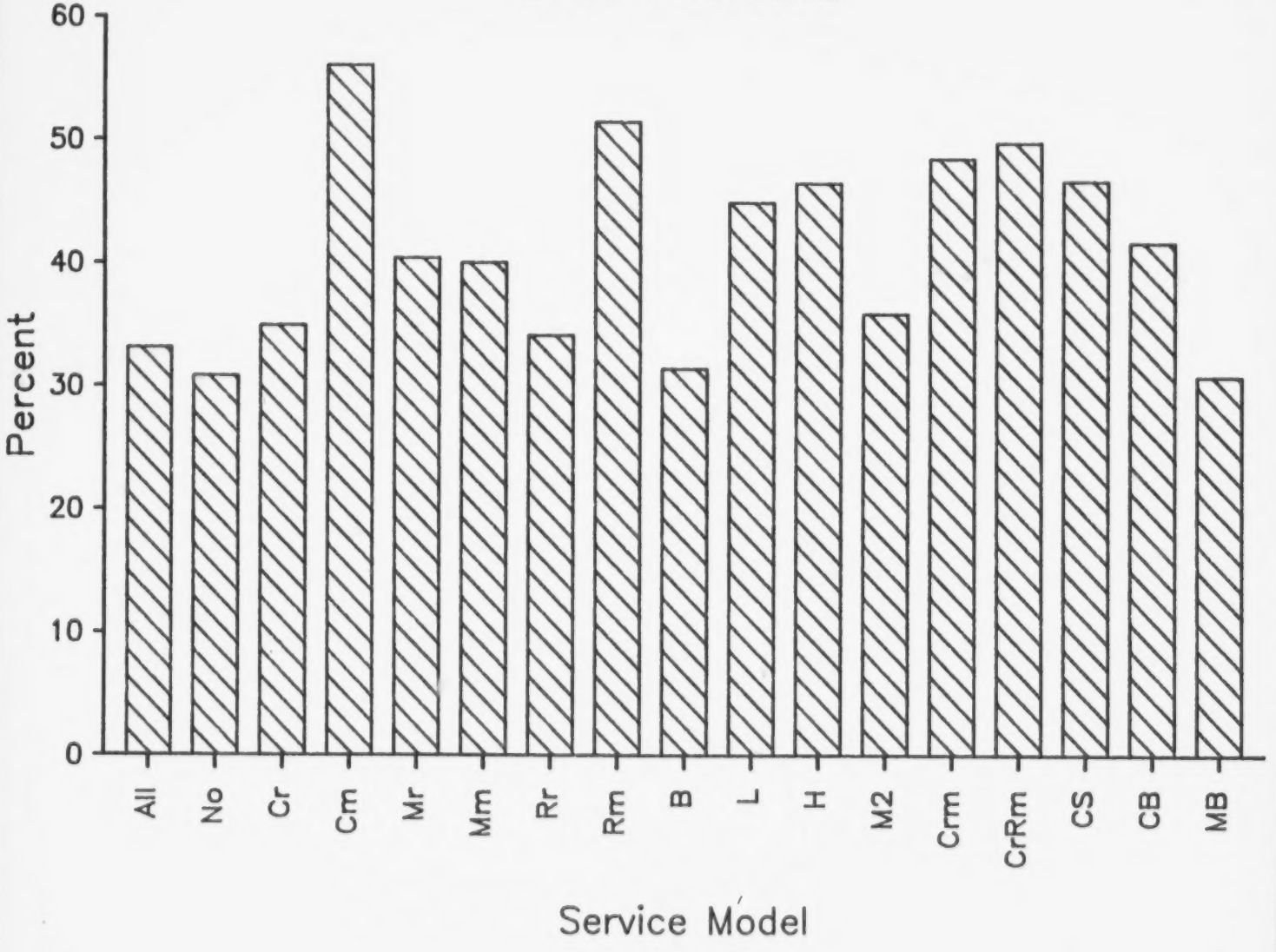


FIGURE 19

Need Help in Math

Grade 8 Students

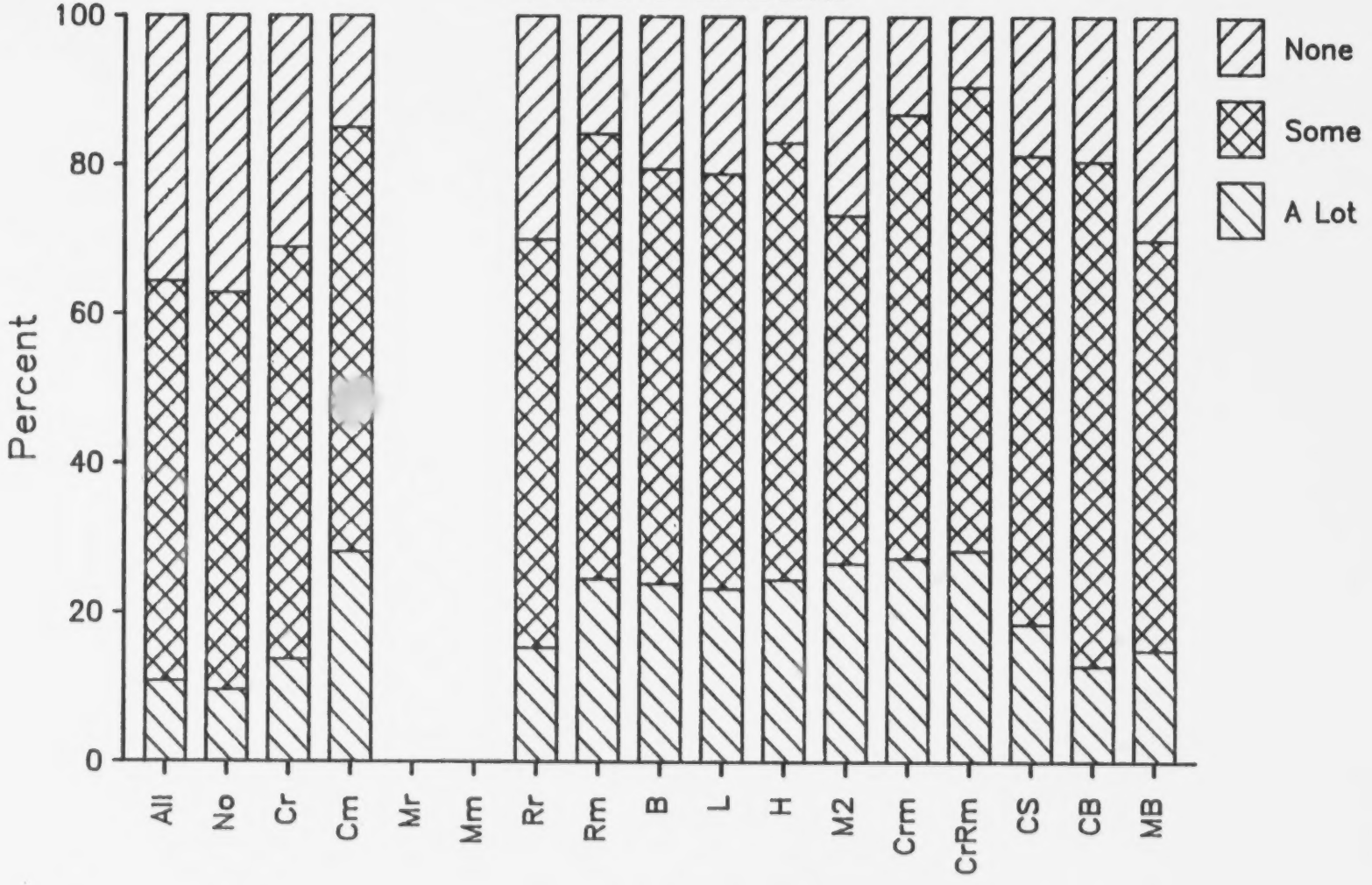
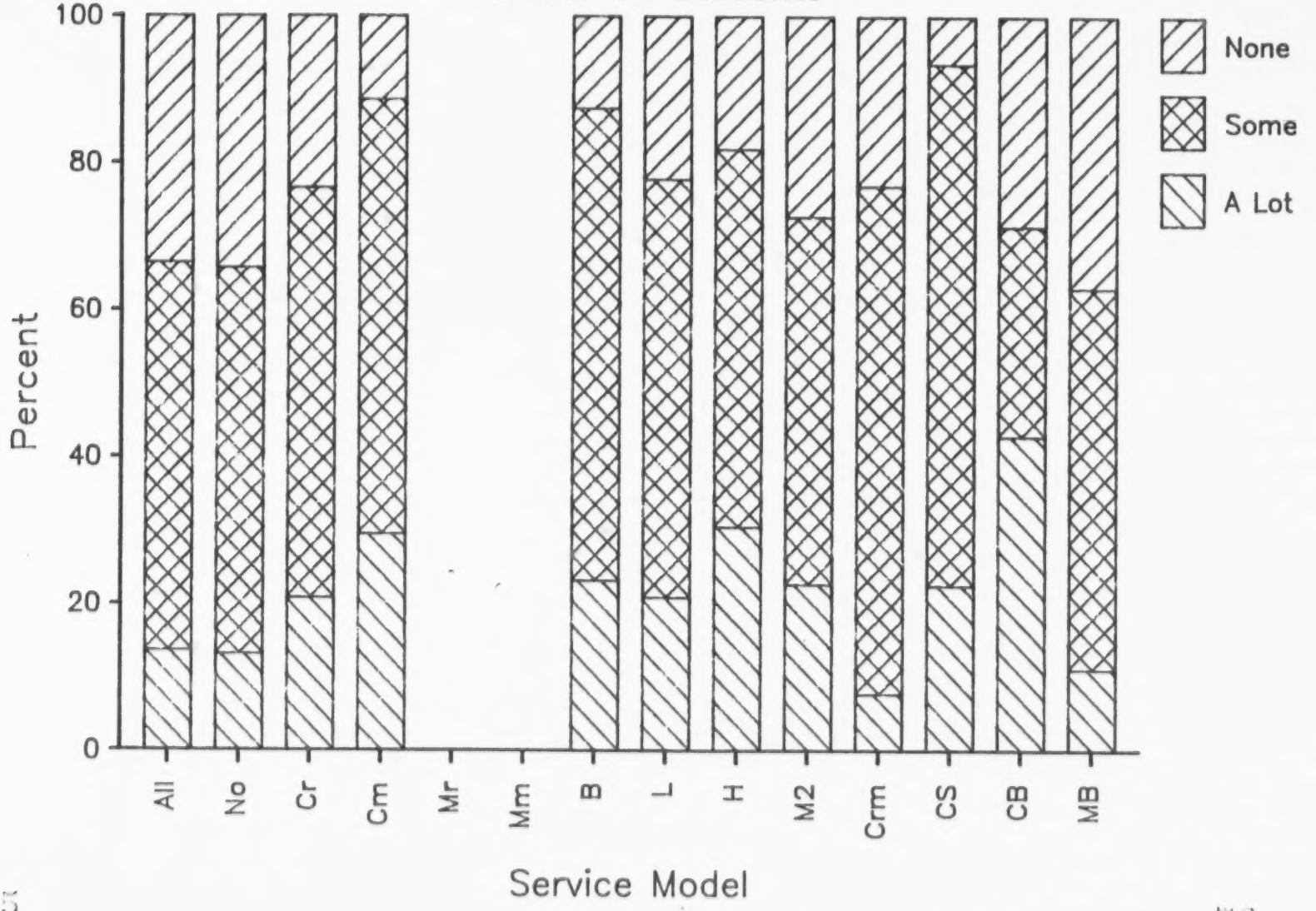


FIGURE 20

Need Help in Math

Grade 10 Students



4.3 Characteristics and Experiences of Special Program Populations

A third objective of this study was to describe the characteristics, school experiences, and educational plans of the single and multiple special program participant. Section 4.3 details these findings using the format established in previous sections.

Research Question 11. Are special program students more likely to be boys or girls?

Table 15 and accompanying Figures 21, 22 and 23 display the gender of students in all grades, by all program combinations.

Generally, there are more males served in special programs than females. While the non-served population is split between males and females, the single service population shows a distinct preponderance of males at grades 4, 8 and 10. For example, in all grades, only about 35 percent of the learning disabled, handicapped and RAP populations are female.

One interesting phenomena is noted in the population served only by Migrant education programs. At grade 4, the male-female special program enrollment nearly reflects the general population. At grade 8, about 70 percent of the service is directed toward males, whereas at grade 10, only about 35 percent of the enrollment is male.

The multiply-served students closely reflect the singly served except in the case of the multiply-served special education student who is most likely to be male.

Few statements can be made about the multiply-served population at grade 10 given the low numbers of students in these categories in the state testing program.

Research Question 12. Are special programs students older than their peers?

The answer is resoundingly yes. While only 21 percent of all fourth-grade students with no special services are older than the age designated for their grade in October, 35 percent of Chapter 1 students are overage and 56 percent of migrant students are overage. The highest incidence of overage students is in special education categories, both singly and in combination with other programs. Multiply-served students are in all cases older than the noncompensatory education served student. Table 15 and the accompanying Figures 24, 25 and 26 display the overage population by grade and special program grouping. Note the particularly high percentage of special education students older than expected at all levels and in all program combinations.

Research Question 13. What is the ethnic/racial distribution of special program students?

Table 16 displays the racial/ethnic breakdown of special program students by service combination and by grade. Figures 27, 28 and 29 illustrate these findings.

Table 15

Gender and Age by Service Model

Code	Model	Percent Male	Percent Older* than Expected
-- Grade 4 --			
All	All Students	50.6%	24.8%
No	No Services	49.2	20.9
C	Chapter 1 only	53.7	35.4
M	Migrant only	53.4	56.2
R	RAP only	53.9	34.1
B	Bilingual only	54.0	36.9
L	Learning Disabled only	65.8	61.4
H	Handicapped only	63.2	54.7
CM	Chapter 1 and Migrant	40.5	60.2
CR	Chapter 1 and RAP	56.1	36.8
CS	Chapter 1 and Special Education	64.0	60.2
rB	Reading and Bilingual	55.8	51.7
-- Grade 8 --			
All	All Students	50.8	23.8
No	No Services	49.3	20.5
C	Chapter 1 only	57.3	43.5
M	Migrant only	71.0	59.3
R	RAP only	59.4	37.4
B	Bilingual only	55.0	44.5
L	Learning Disabled only	67.3	62.2
H	Handicapped only	65.6	51.1
CM	Chapter 1 and Migrant	40.0	80.0
CR	Chapter 1 and RAP	60.1	49.7
CS	Chapter 1 and Special Education	74.3	65.2
rB	Reading and Bilingual	51.6	48.3
-- Grade 10 --			
All	All Students	51.0	19.2
No	No Services	50.2	17.4
C	Chapter 1 only	61.9	41.3
M	Migrant only	34.4	51.5
B	Bilingual only	58.2	62.3
L	Learning Disabled only	71.7	54.5
H	Handicapped only	61.3	55.7
CM	Chapter 1 and Migrant	-	-
CS	Chapter 1 and Special Education	65.6	53.1
rB	Reading and Bilingual	-	-

*Expected age assumes that first graders are 6 years old in October.

Note - Data are not reported for models with less than 10 students.
RAP is not offered at Grade 10.

Source: 1985 Washington Statewide Assessment

FIGURE 21

Gender by Service Model

Grade 4 Students

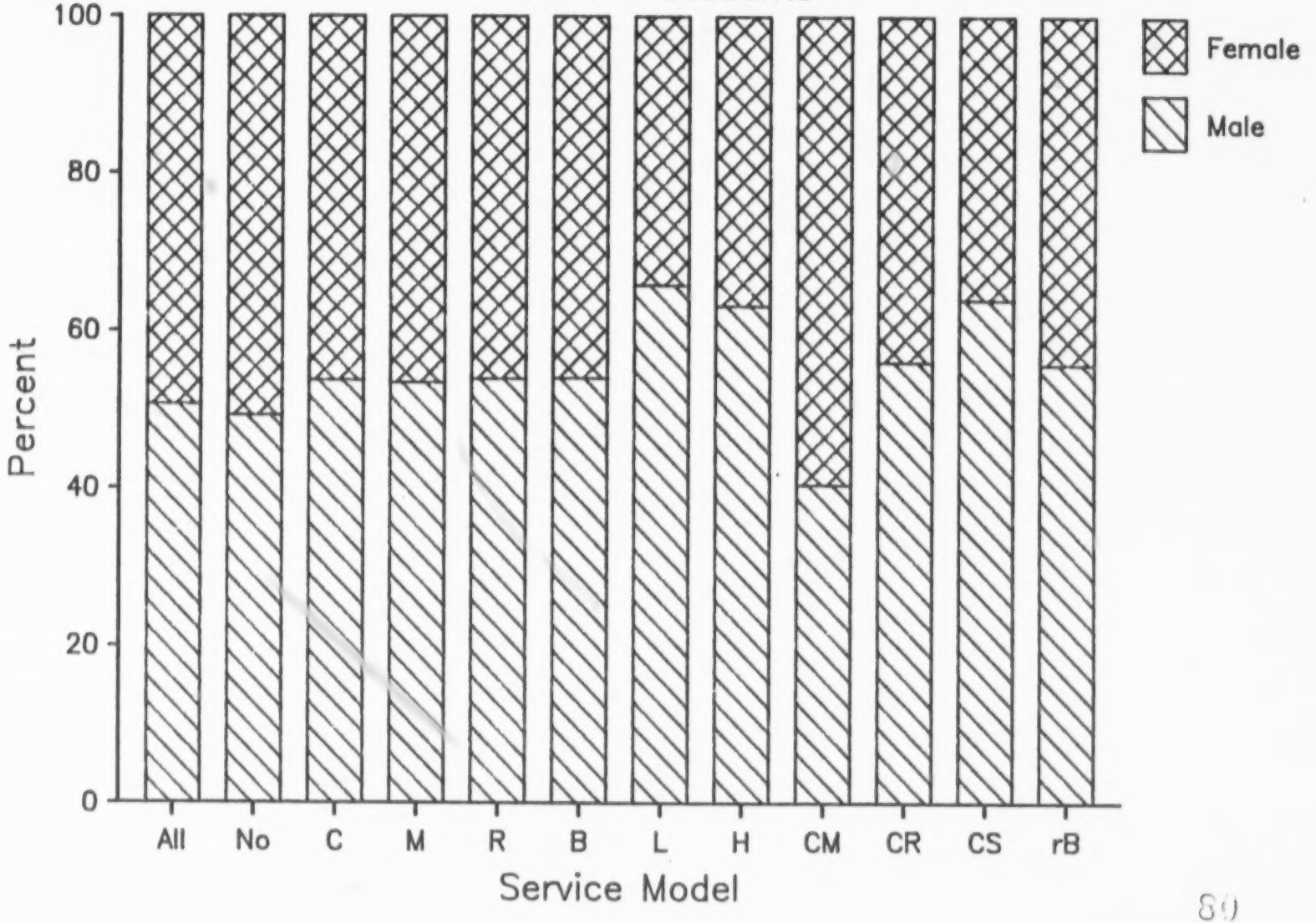


FIGURE 22

Gender by Service Model

Grade 8 Students

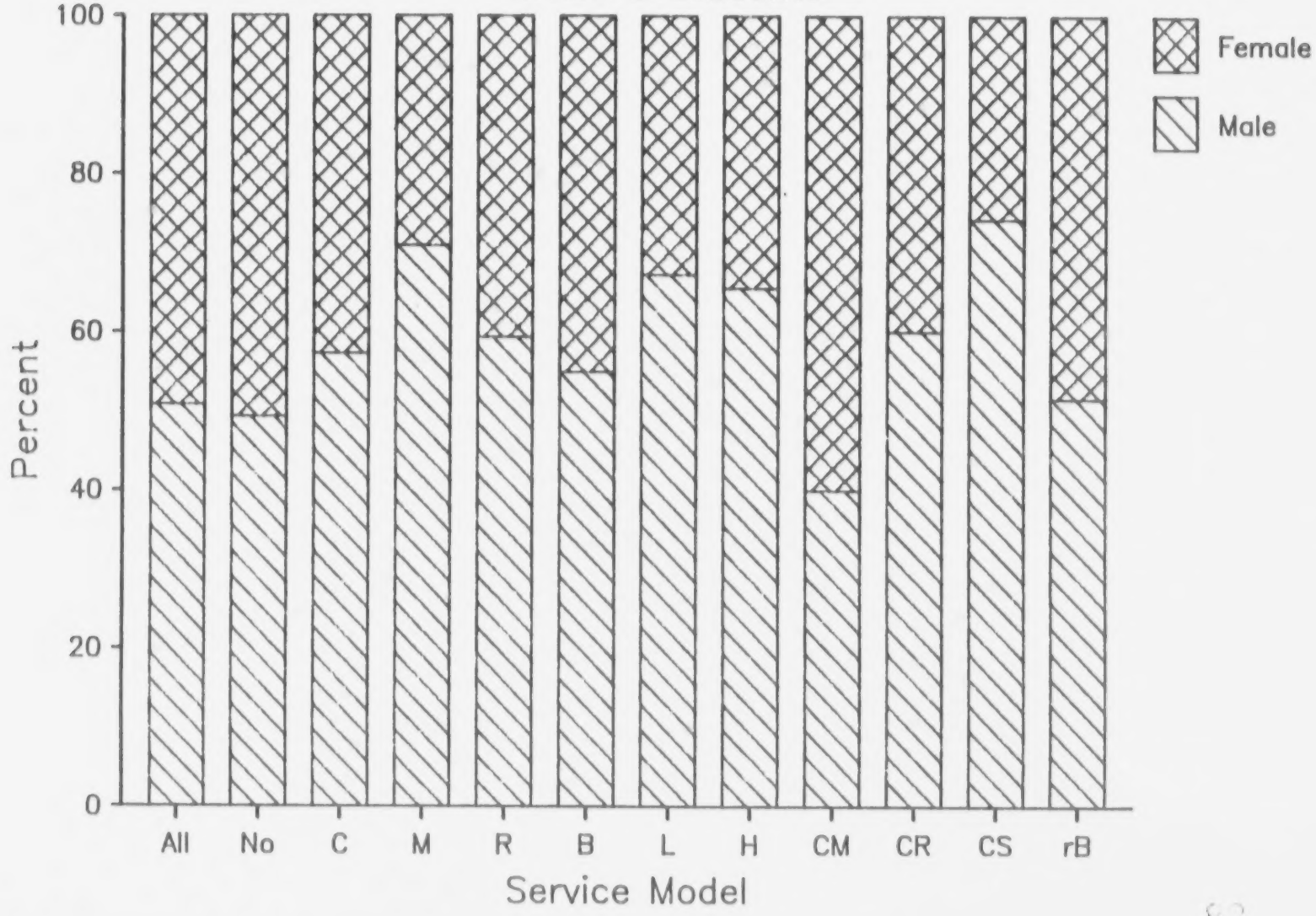


FIGURE 23

Gender by Service Model

Grade 10 Students

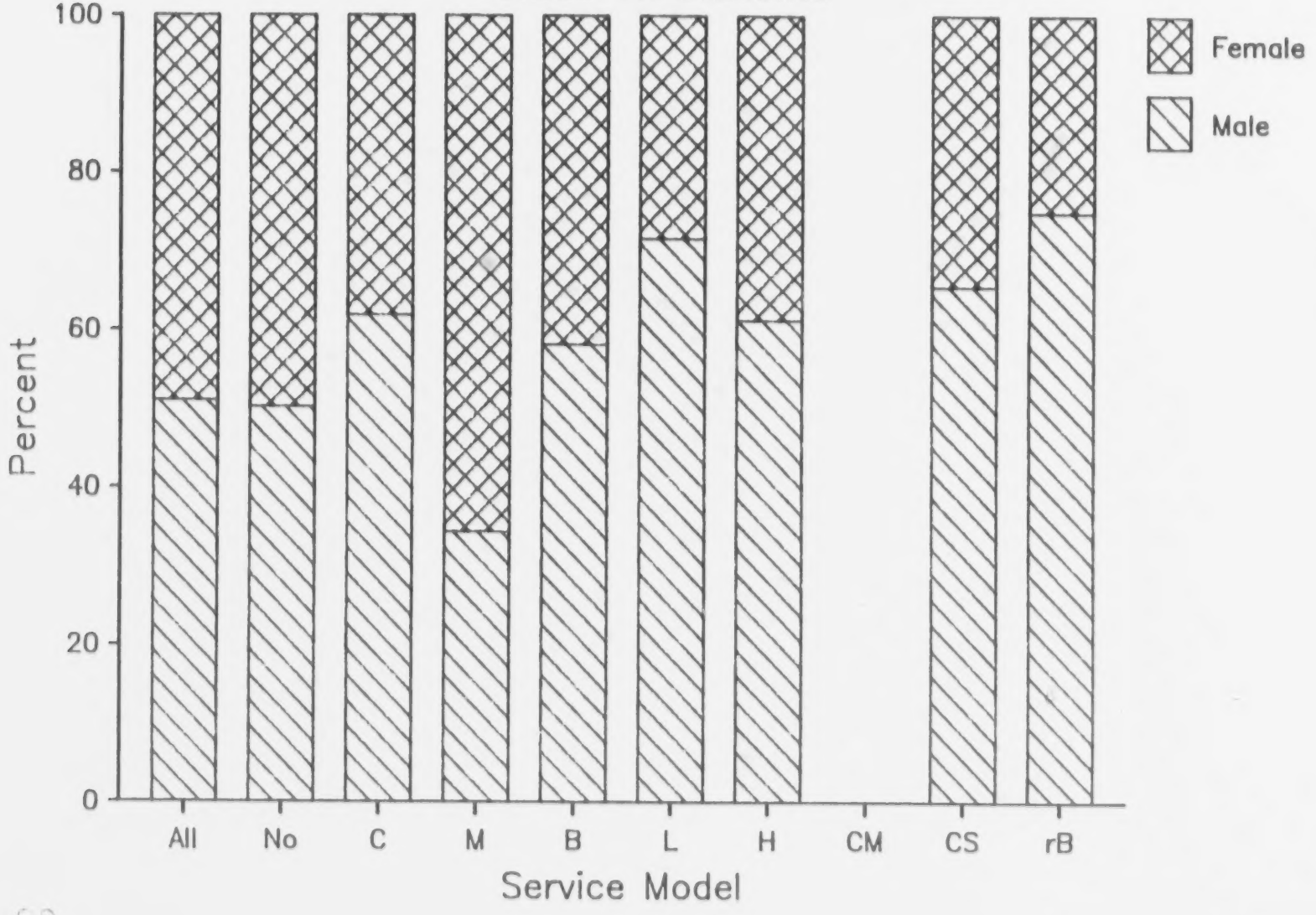


FIGURE 24

Students Older than Expected

Grade 4

FIGURE 25

Students Older than Expected

Grade 8

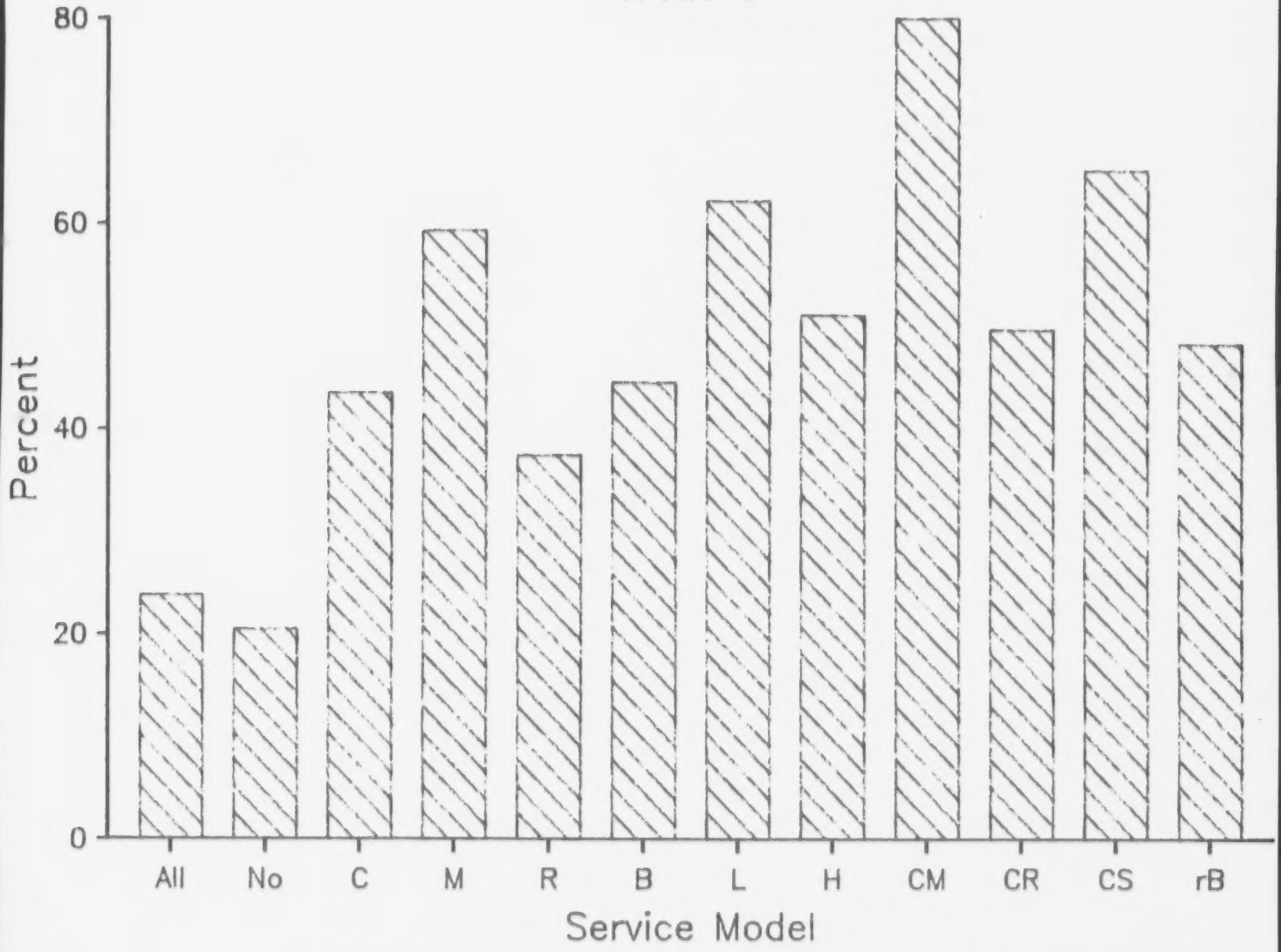


FIGURE 26

Students Older than Expected

Grade 10

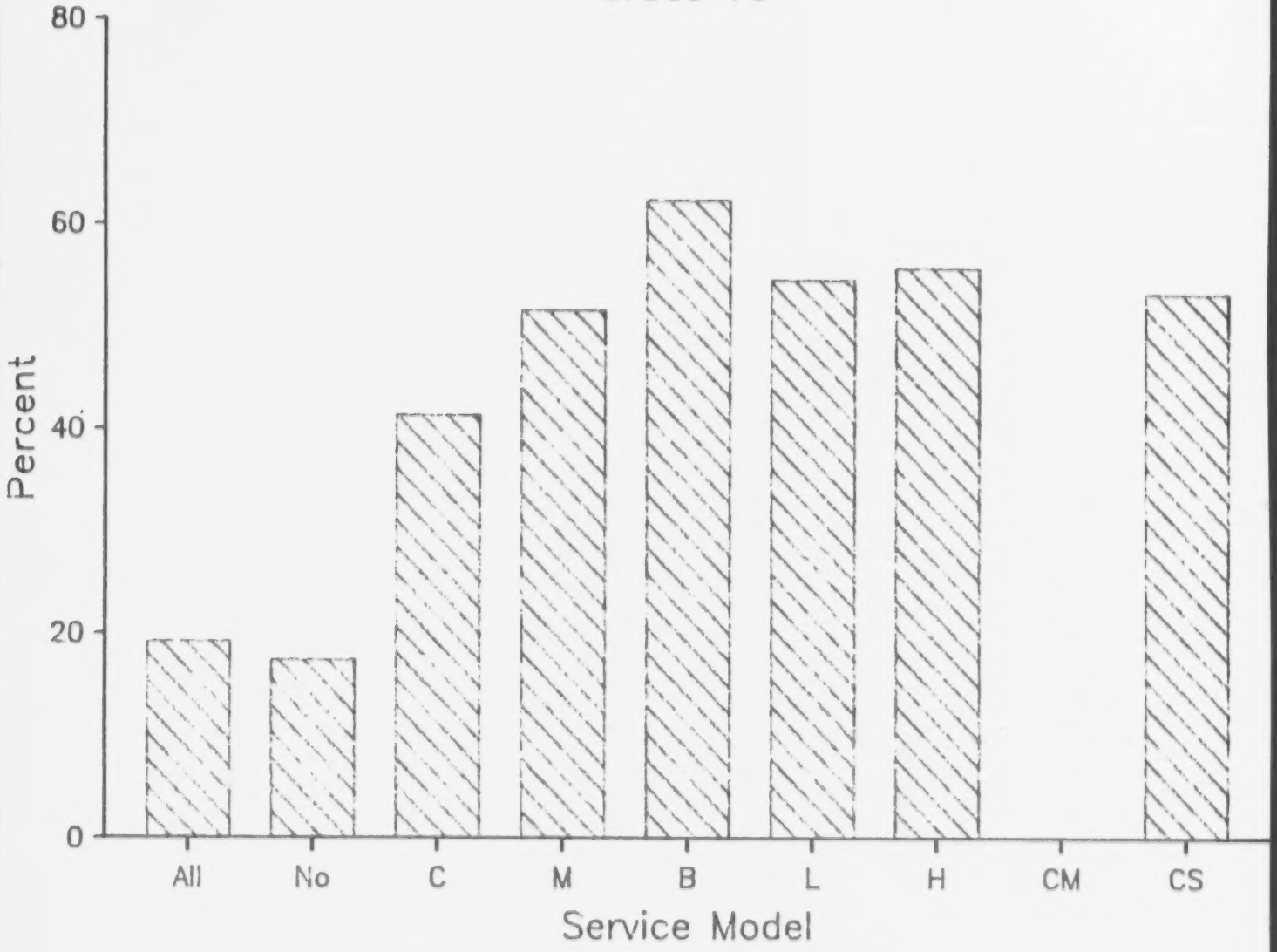


Table 16

Racial/Ethnic Group by Service Model

Code	Model	Racial/Ethnic Group				
		Indian	Asian	Black	Hispanic	White
-- Grade 4 --						
All	All Students	2.1%	4.8%	4.0%	4.0%	85.1%
No	No Services	1.8	4.3	3.1	2.9	87.9
C	Chapter 1 only	3.2	4.7	8.4	4.9	78.8
M	Migrant only	3.3	.8	.8	60.3	34.8
R	RAP only	3.1	2.9	6.5	4.8	82.7
B	Bilingual only	.6	63.2	.3	25.5	10.4
L	Learning Disabled only	3.0	1.8	8.4	2.7	84.1
H	Handicapped only	2.4	3.2	6.3	6.3	81.8
CM	Chapter 1 and Migrant	2.8	2.8		75.0	19.4
CR	Chapter 1 and RAP	4.0	2.9	5.5	4.7	82.9
CS	Chapter 1 and Special Education	4.3	2.9	8.6	4.3	79.9
rB	Reading and Bilingual	.0	50.5	2.2	44.1	3.2
-- Grade 8 --						
All	All Students	3.6	4.6	3.4	3.1	85.3
No	No Services	3.2	4.3	3.2	2.6	86.6
C	Chapter 1 only	7.6	4.0	3.5	7.0	77.9
M	Migrant only	.0	.0	.0	80.6	19.4
R	RAP only	5.2	3.2	4.0	4.9	82.7
B	Bilingual only	3.7	70.1	2.0	13.8	10.4
L	Learning Disabled only	6.1	1.4	7.1	3.0	82.4
H	Handicapped only	6.1	2.5	11.9	2.5	77.0
CM	Chapter 1 and Migrant	.0	.0	.0	60.0	40.0
CR	Chapter 1 and RAP	15.5	1.2	4.8	11.9	66.6
CS	Chapter 1 and Special Education	7.6	2.1	2.8	6.9	80.6
rB	Reading and Bilingual	6.7	26.7	3.3	53.3	10.0
-- Grade 10 --						
All	All Students	2.6	4.8	3.3	2.5	86.8
No	No Services	2.4	4.4	3.3	2.3	87.6
C	Chapter 1 only	7.1	3.4	2.2	7.7	79.6
M	Migrant only				93.3	6.7
B	Bilingual only	2.4	82.1	1.8	9.3	4.4
L	Learning Disabled only	5.9	1.4	4.7	2.6	85.4
H	Handicapped only	6.4	1.8	6.4	2.8	82.6
CM	Chapter 1 and Migrant					
CS	Chapter 1 and Special Education	.0	3.2	9.7	9.7	77.4
rB	Reading and Bilingual					

Note - Data are not reported for models with less than 10 students. RAP is not offered at Grade 10.

Source: 1985 Washington Statewide Assessment

FIGURE 27

Racial/Ethnic Group by Service Model

Grade 4 Students

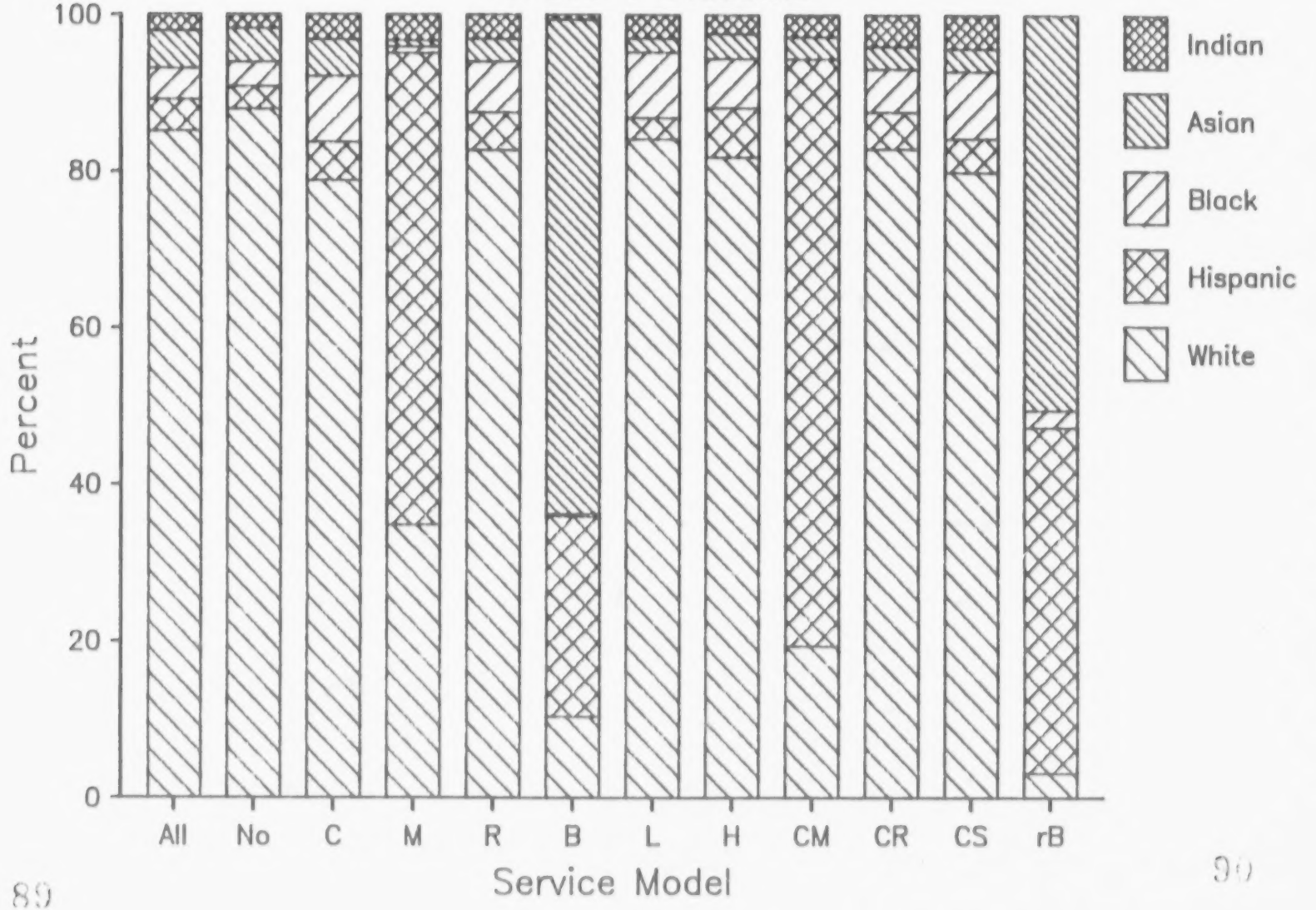


FIGURE 28

Racial/Ethnic Group by Service Model

Grade 8 Students

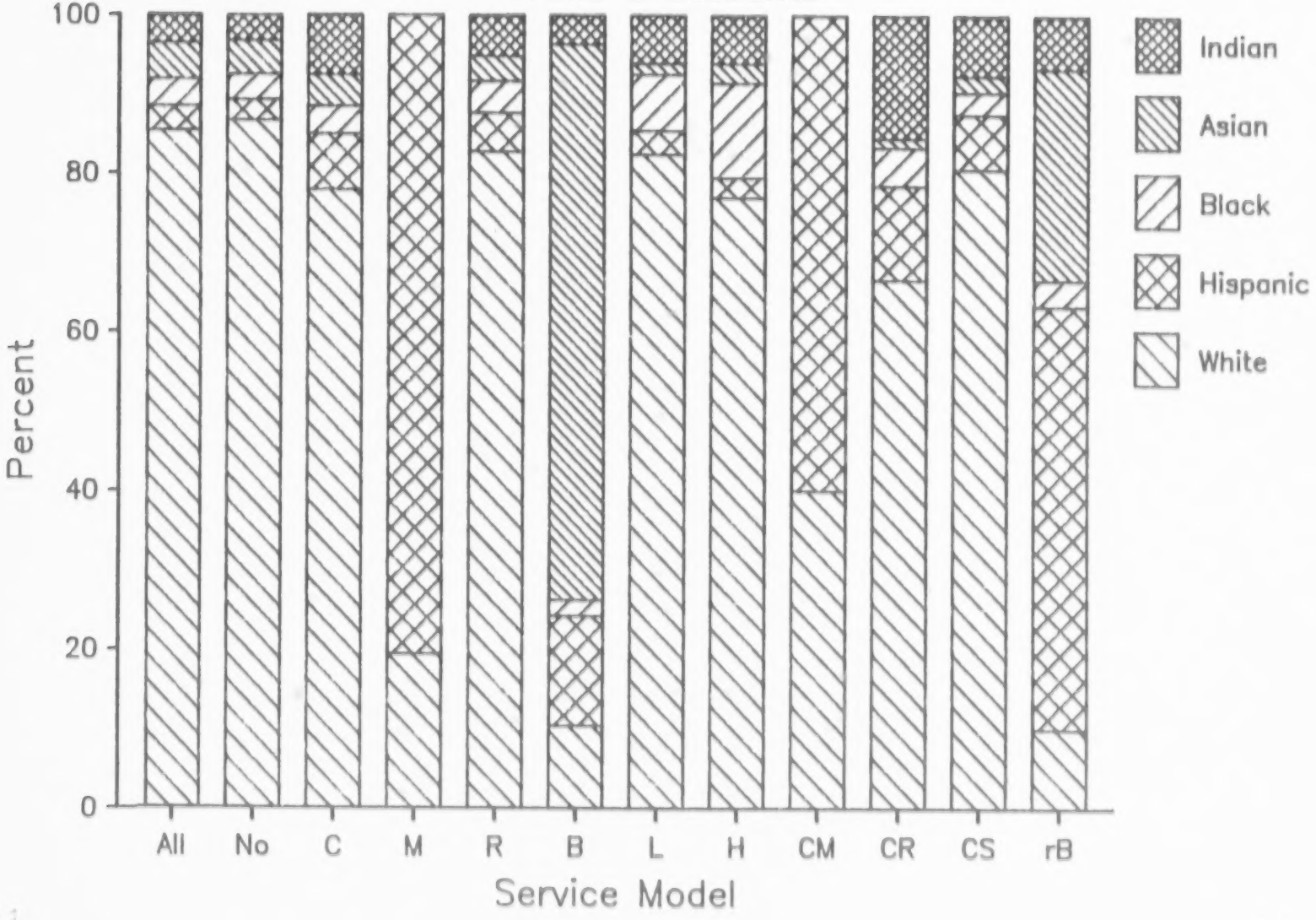
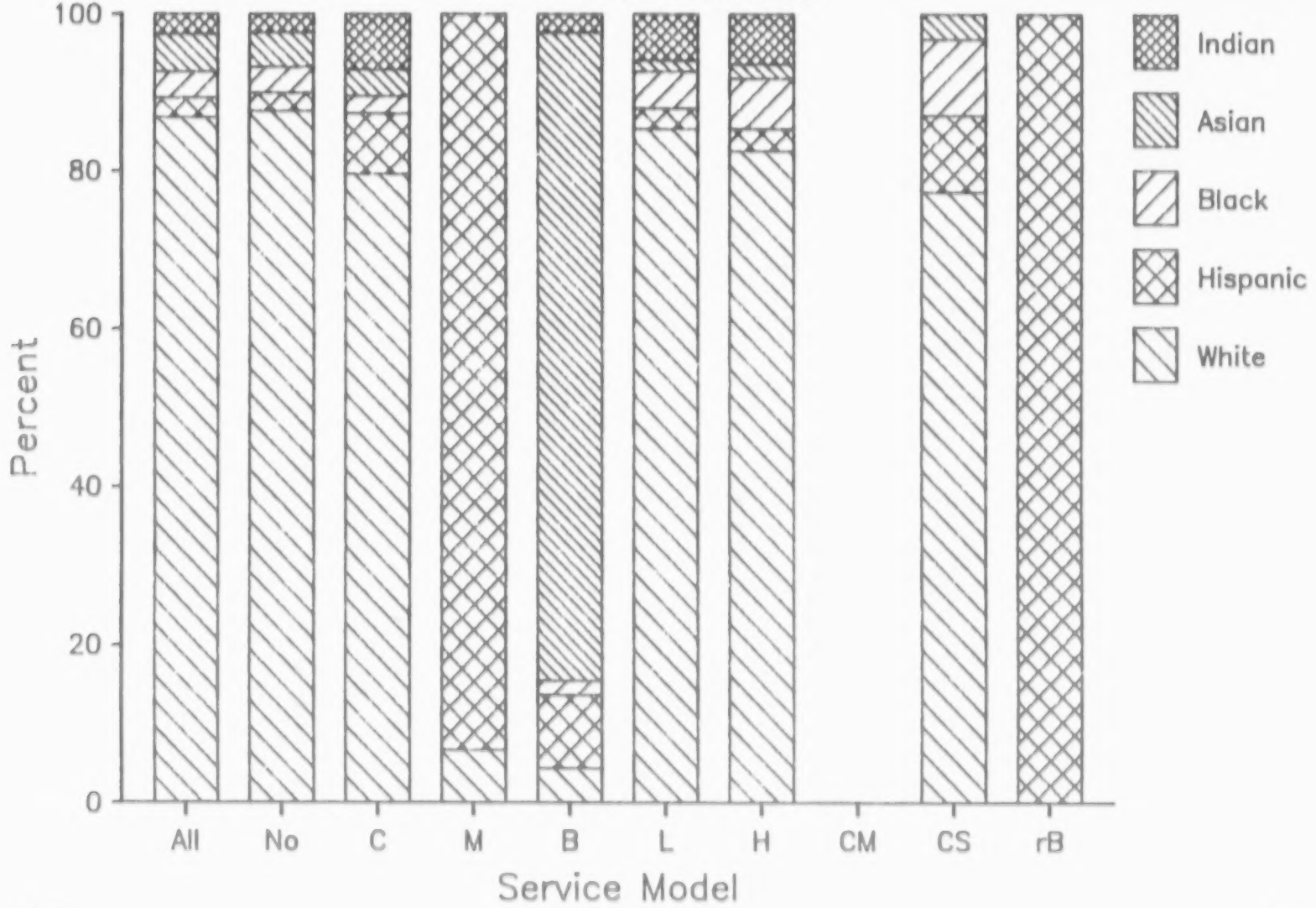


FIGURE 29

Racial/Ethnic Group by Service Model

Grade 10 Students



Some interesting trends appear in the data. As might be expected, Hispanics dominate the Chapter 1 Migrant population and Asians dominate the Bilingual population. The percentage of blacks served in grade 4 Chapter 1 program only is nearly two and one-half times the percentage of blacks in the total population. At grade 10, however, the percentage of blacks in Chapter 1 only is less than the percentage of blacks in the total population. By contrast, the percentage of Native Americans served in Chapter 1 only at grade 10 is about two and one-half times greater than the percent in the general population. A much higher percentage of the grade 4 Bilingual Program is made up of Hispanics compared to the grade 10 Bilingual Program.

There are also a few notable differences in the multiply-served population. Asians and Hispanics dominate the multiply-served Bilingual population. A relatively high percentage (16%) of the Chapter 1-RAP students at grade 10 are American Indian.

Research Question 14. Do special program students experience different preschool and day care experiences than the average student?

The preschool experiences of Washington students are summarized by grade and service model in Table 17 and Figures 30, 31 and 32.

Students in special programs are much less likely to have had preschool experiences than the general population. Many more have been involved in daycare with the general exceptions of Bilingual and Migrant Program students who report lower involvement in both preschool and day care. Interestingly, significantly more grade 4 Chapter 1 Migrant Program students report day care experience than at grade 8 or 10.

Students served in multiple programs report participation in preschool and day care activities at about the same rate as those students served by a single program. Special program students at grade 4 reported somewhat higher participation in day care than their counterparts at grade 8.

Research Question 15. Are special program students absent more often than their peers?

Generally, the patterns of self-reported absentee rates of students in special programs do not differ markedly from those of the general population. One notable exception is in the Bilingual Program where students reported generally lower absentee rates than the other programs or the general population. The grade 10 Chapter 1 Migrant students reported higher absentee rates than did other groups. See Table 18 and Figure 33, 34 and 35 for the display of this data.

Research Question 16. What learning resources are available to the special needs child?

The students were asked whether they had a microcomputer or a VCR in the home. The intent was to determine whether disadvantaged youth commonly have access to appliances which can be used as learning tools. The percent of students with a microcomputer or a VCR are given in Table 19 and Figures 36, 37, and 38.

Table 17

Preschool Experience by Service Model

Code	Model	Percent Attended Preschool	Percent Attended Day Care
-- Grade 4 --			
All	All Students	61.7%	39.3%
No	No Services	64.0	39.6
C	Chapter 1 only	51.2	37.5
M	Migrant only	30.2	43.1
R	RAP only	54.3	40.2
B	Bilingual only	33.0	24.2
L	Learning Disabled only	53.0	38.6
H	Handicapped only	51.1	37.2
CM	Chapter 1 and Migrant	34.8	60.0
CR	Chapter 1 and RAP	49.6	41.7
CS	Chapter 1 and Special Education	53.4	35.7
rB	Reading and Bilingual	16.9	25.0
-- Grade 8 --			
All	All Students	58.1	31.9
No	No Services	59.4	32.3
C	Chapter 1 only	50.4	28.5
M	Migrant only	21.7	18.2
R	RAP only	50.3	27.2
B	Bilingual only	17.6	8.1
L	Learning Disabled only	46.1	28.5
H	Handicapped only	50.4	38.3
CM	Chapter 1 and Migrant	-	-
CR	Chapter 1 and RAP	36.1	27.3
CS	Chapter 1 and Special Education	45.1	24.5
rB	Reading and Bilingual	18.8	42.9
-- Grade 10 --			
All	All Students	55.0	27.6
No	No Services	55.8	27.9
C	Chapter 1 only	38.9	20.7
M	Migrant only	21.7	30.8
B	Bilingual only	13.9	7.7
L	Learning Disabled only	42.6	24.5
H	Handicapped only	39.2	27.1
CM	Chapter 1 and Migrant	-	-
CS	Chapter 1 and Special Education	40.0	18.2
rB	Reading and Bilingual	-	-

Note - Data are not reported for models with less than 10 students. RAP is not offered at Grade 10.

Source: 1985 Washington State Assessment

FIGURE 30

Preschool Experience by Model

Grade 4 Students

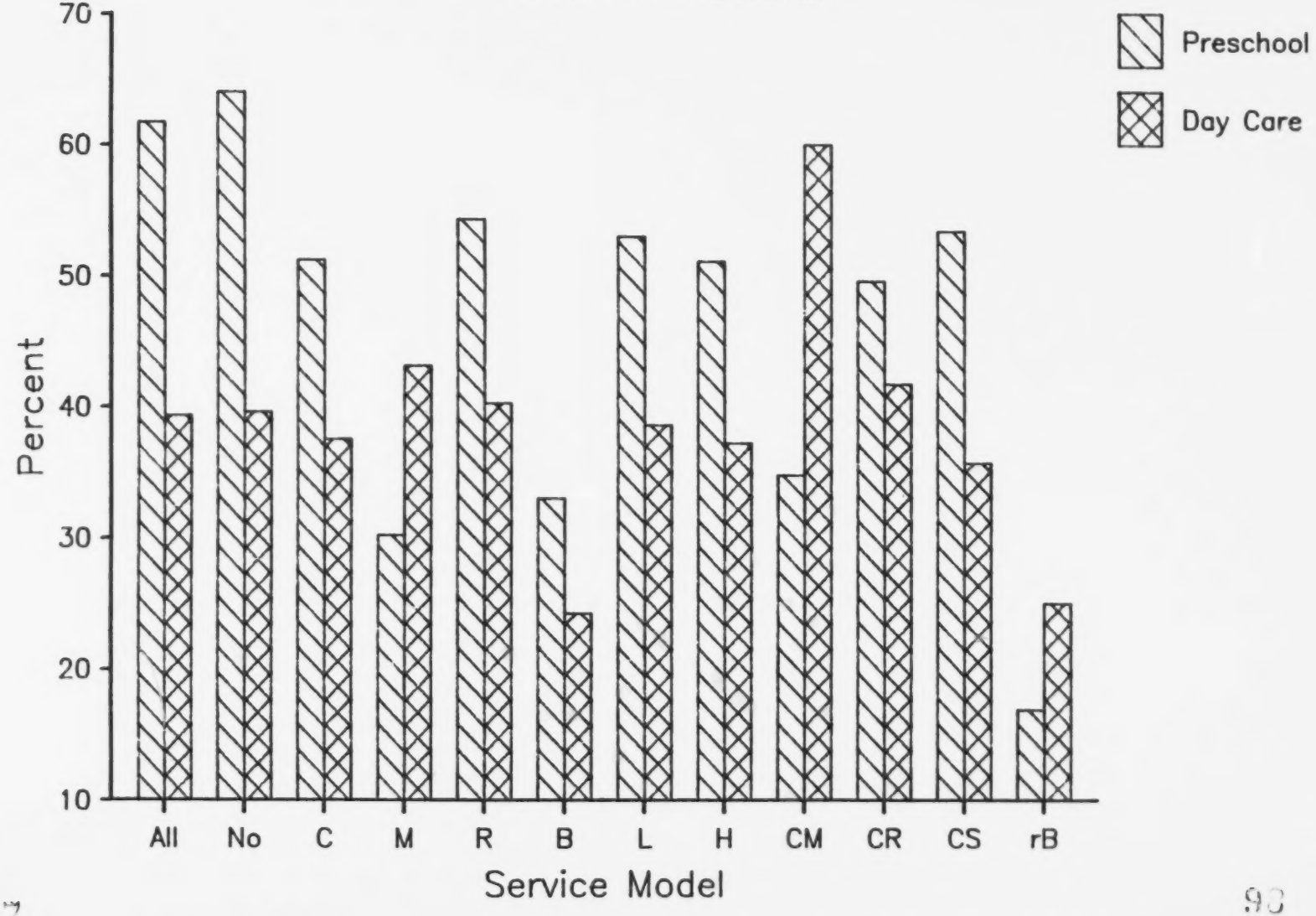


FIGURE 31

Preschool Experience by Model

Grade 8 Students

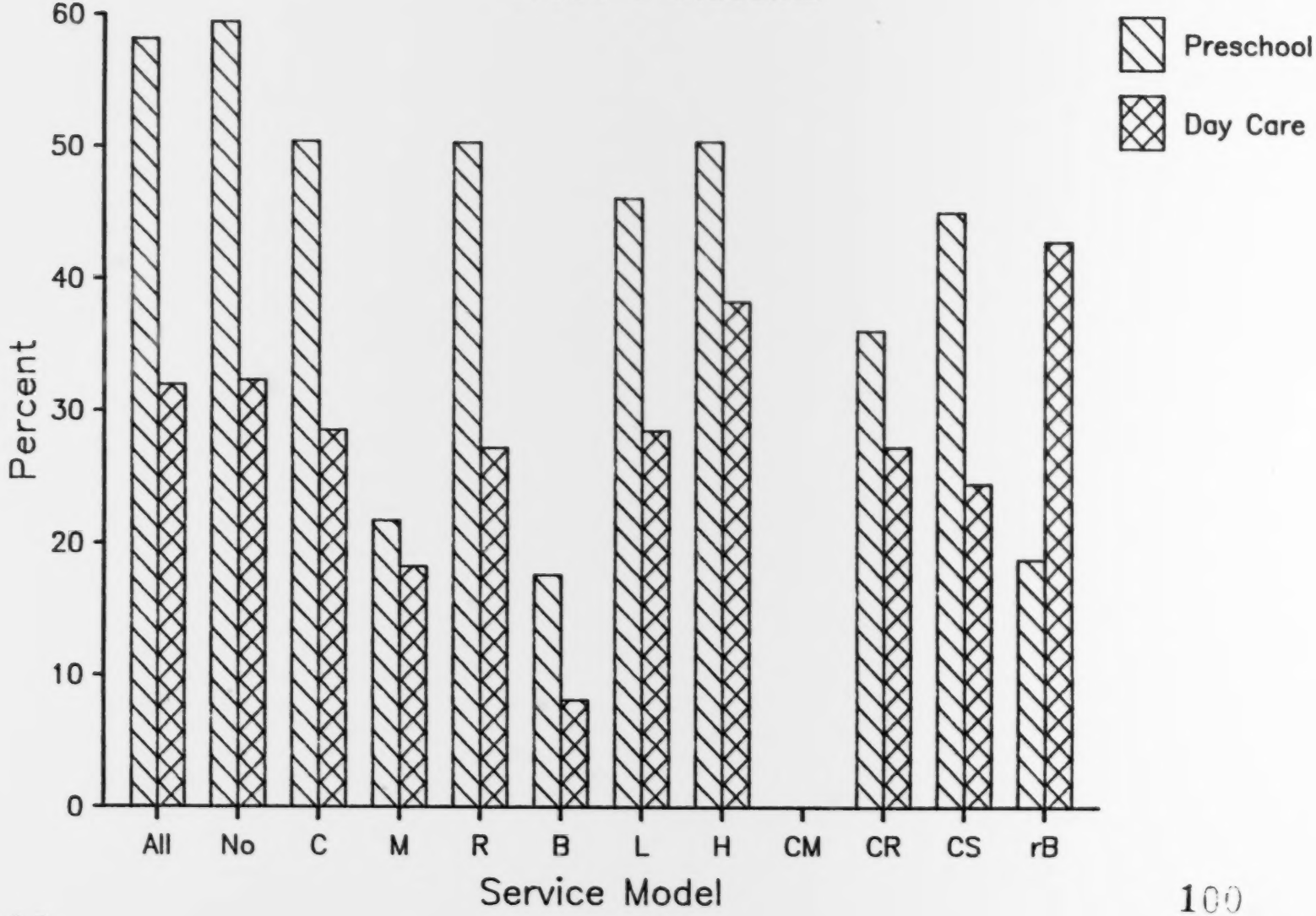


FIGURE 32

Preschool Experience by Model

Grade 10 Students

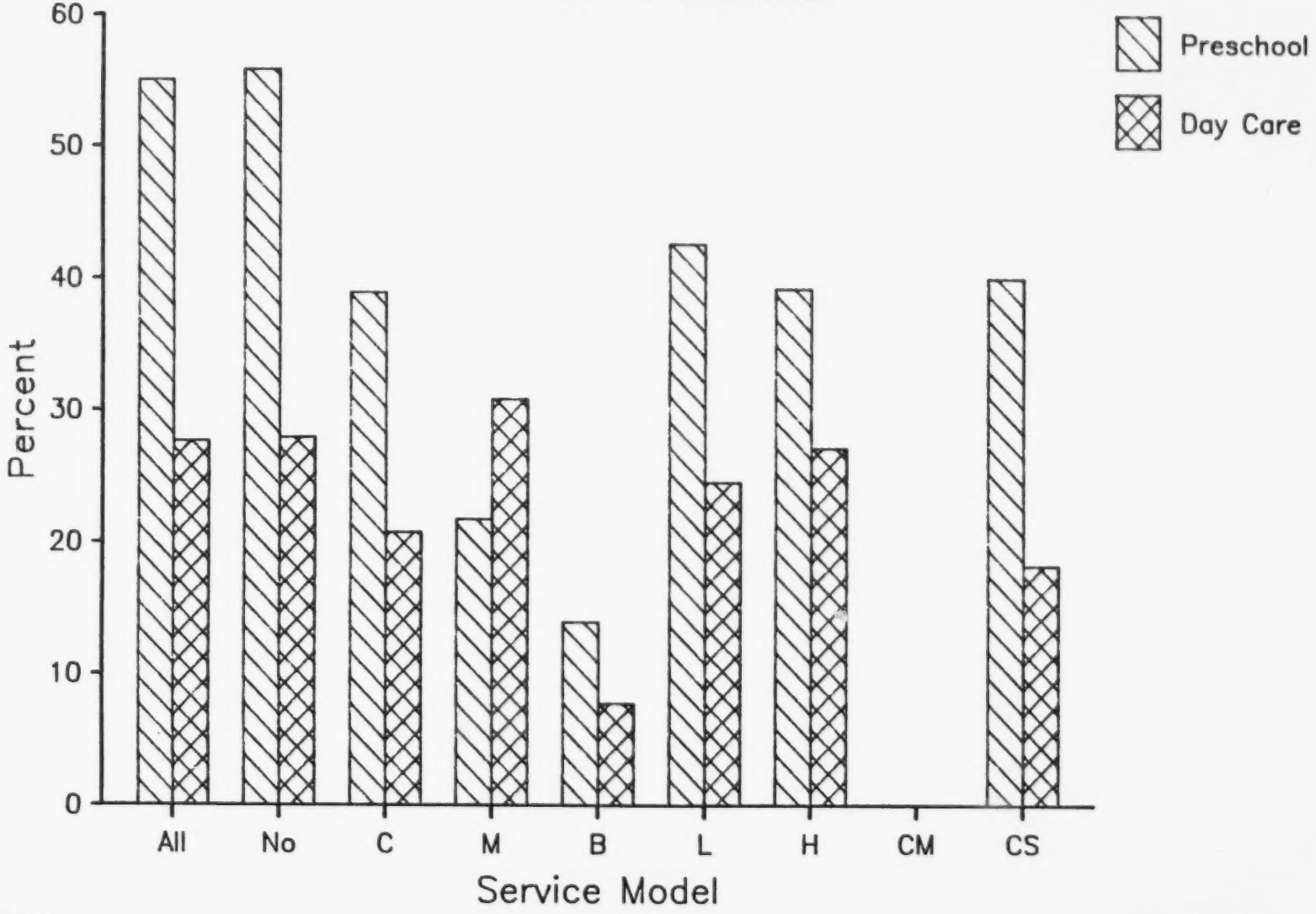


Table 18

Absenteeism by Service Model

Code	Model	Days Absent <5	5-10	11-20	>20
-- Grade 4 --					
All	All Students	50.0%	33.6%	11.7%	4.7%
No	No Services	48.7	34.7	12.1	4.5
C	Chapter 1 only	54.6	28.5	10.7	6.2
M	Migrant only	63.1	24.2	5.4	7.3
R	RAP only	53.2	30.8	11.0	5.0
B	Bilingual only	69.2	22.0	5.6	3.2
L	Learning Disabled only	55.1	28.4	9.6	6.9
H	Handicapped only	53.3	34.9	6.3	5.5
CM	Chapter 1 and Migrant	64.8	27.0	5.4	2.8
CR	Chapter 1 and RAP	54.4	27.9	11.7	6.0
CS	Chapter 1 and Special Education	59.5	29.5	6.2	4.8
rB	Reading and Bilingual	71.6	14.7	6.3	7.4
-- Grade 8 --					
All	All Students	38.9	39.2	15.3	6.6
No	No Services	38.9	39.8	15.3	6.0
C	Chapter 1 only	36.1	35.9	16.9	11.1
M	Migrant only	54.8	25.8	9.7	9.7
R	RAP only	35.2	39.1	18.5	7.2
B	Bilingual only	75.4	15.6	4.7	4.3
L	Learning Disabled only	37.5	34.5	17.3	10.7
H	Handicapped only	42.2	30.6	16.9	10.3
CM	Chapter 1 and Migrant				
CR	Chapter 1 and RAP	31.4	39.5	16.9	12.2
CS	Chapter 1 and Special Education	35.9	37.2	18.6	8.3
rB	Reading and Bilingual	46.7	23.3	6.7	23.3
-- Grade 10 --					
All	All Students	38.0	38.5	16.6	6.9
No	No Services	37.9	38.9	16.5	6.8
C	Chapter 1 only	24.8	39.4	25.2	10.6
M	Migrant only	25.0	31.3	21.9	21.8
B	Bilingual only	76.8	15.8	4.5	2.9
L	Learning Disabled only	33.8	32.9	20.1	13.2
H	Handicapped only	39.5	28.8	17.5	14.2
CM	Chapter 1 and Migrant	-	-	-	-
CS	Chapter 1 and Special Education	21.9	50.0	15.6	12.5
rB	Reading and Bilingual	-	-	-	-

Note - Data are not reported for models with less than 10 students.
RAP is not offered at Grade 10.

Source: 1985 Washington State Assessment

FIGURE 33

Days Absent by Service Model

Grade 4 Students

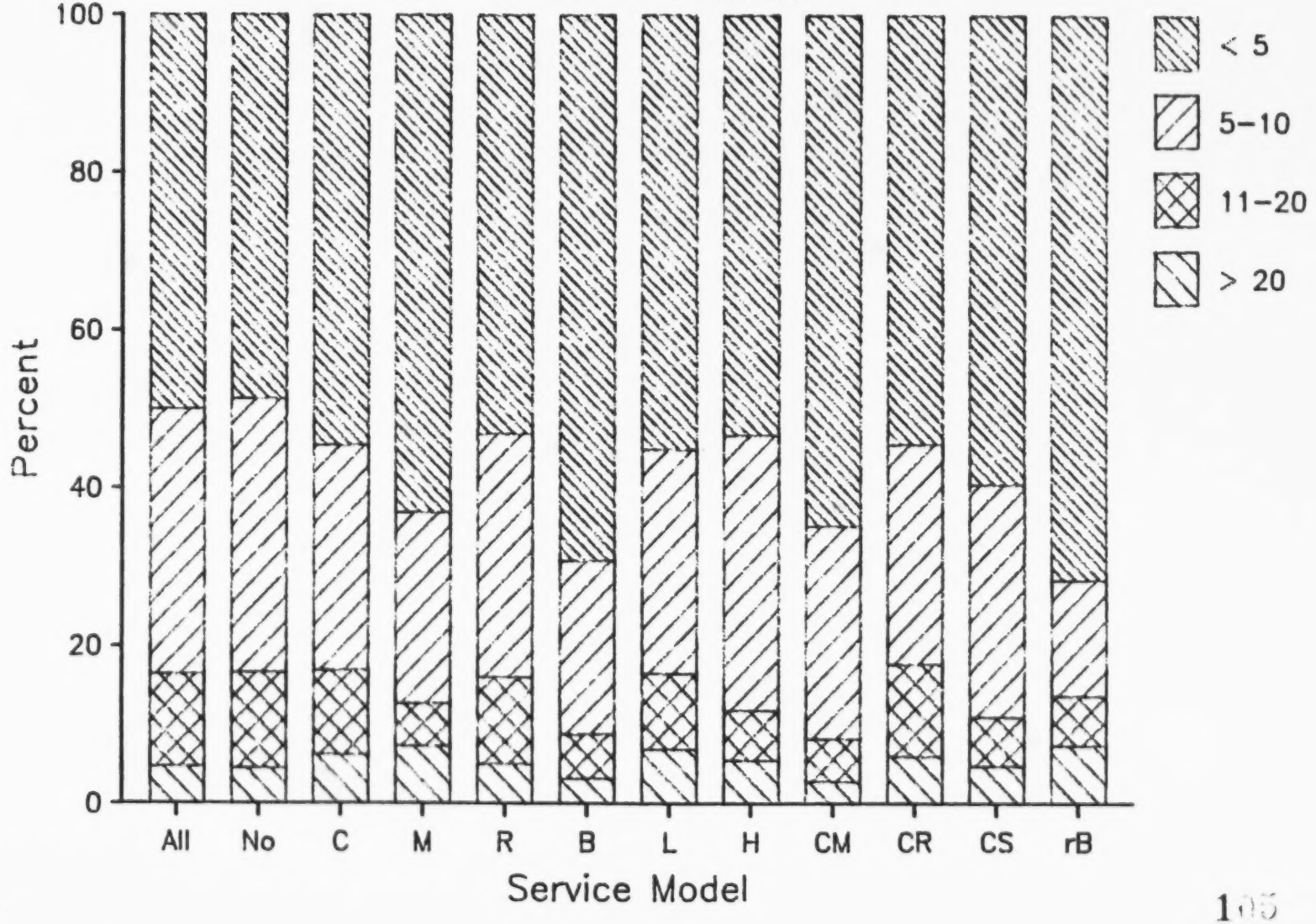


FIGURE 34

Days Absent by Service Model

Grade 8 Students

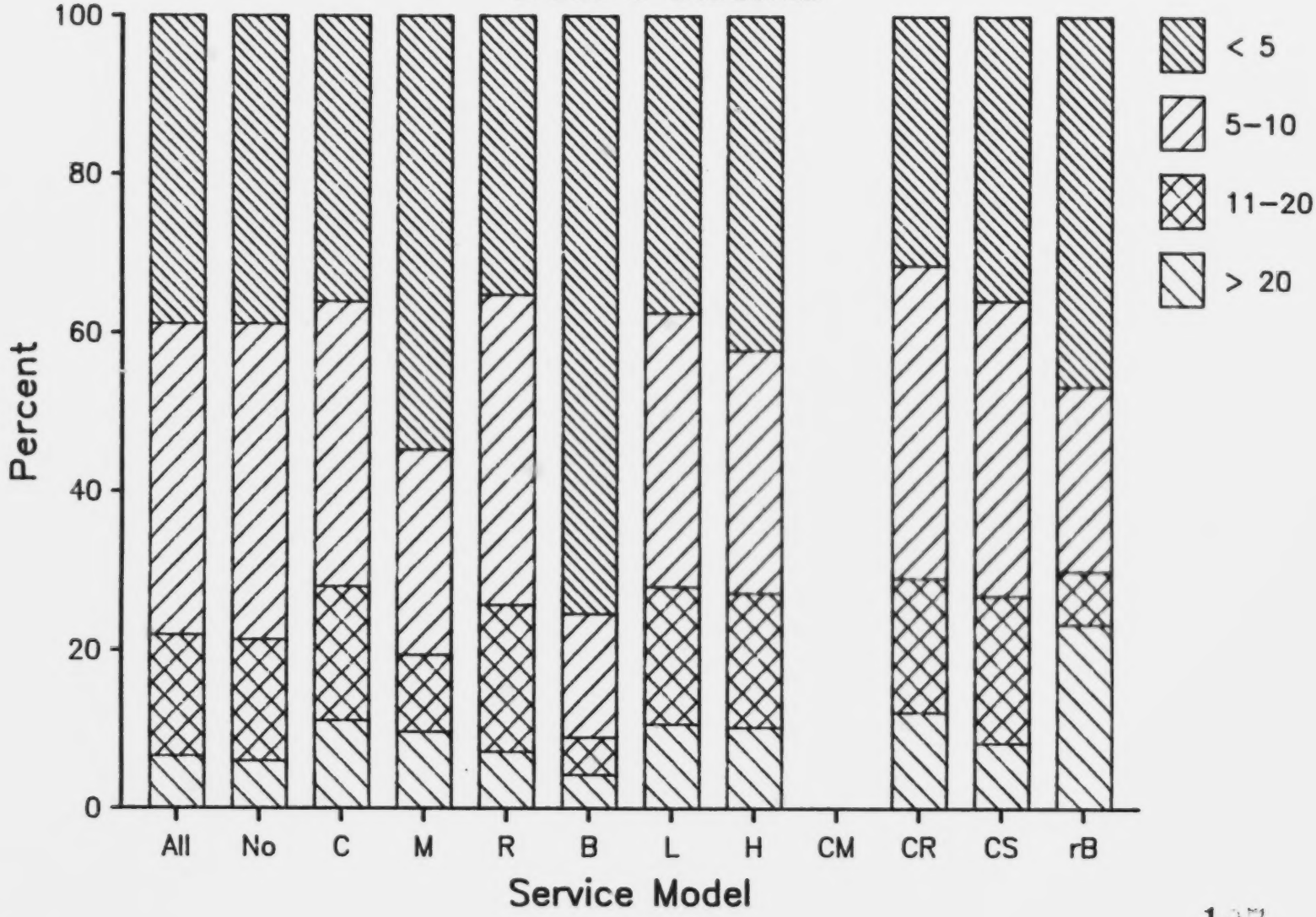


FIGURE 35

Days Absent by Service Model

Grade 10 Students

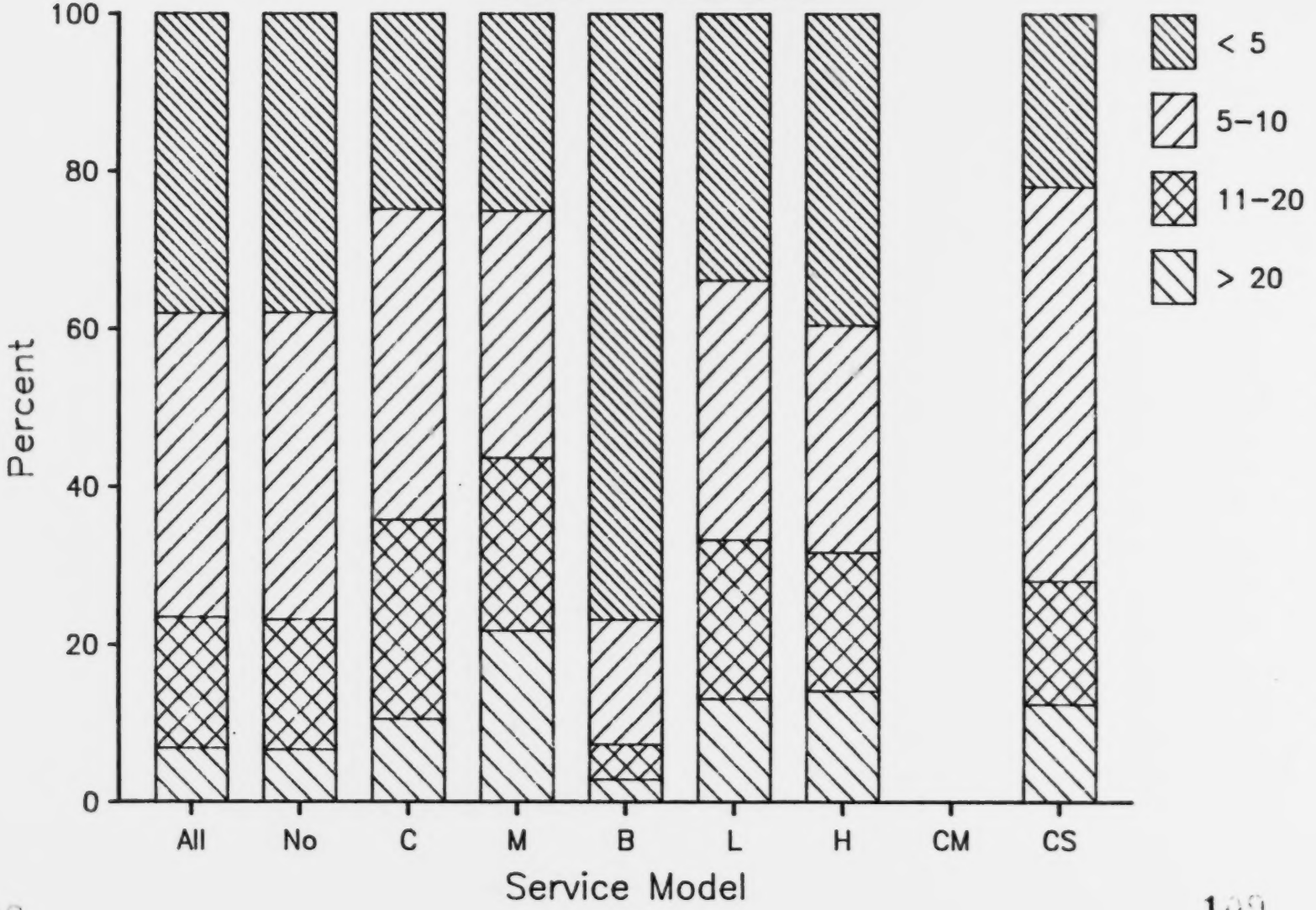


Table 19

Learning Resources in the Home
by Service Model

Code	Model	Percent with Computer	Percent with VCR
-- Grade 4 --			
All	All Students	36.6%	54.3%
No	No Services	37.9	54.6
C	Chapter 1 only	30.1	51.0
M	Migrant only	17.8	29.5
R	RAP only	32.3	55.9
B	Bilingual only	21.1	58.7
L	Learning Disabled only	34.0	56.6
H	Handicapped only	39.0	54.8
CM	Chapter 1 and Migrant	12.5	57.6
CR	Chapter 1 and RAP	27.5	50.0
CS	Chapter 1 and Special Education	31.2	47.6
rB	Reading and Bilingual	21.7	53.3
-- Grade 8 --			
All	All Students	41.2	54.8
No	No Services	42.0	54.8
C	Chapter 1 only	31.7	53.5
M	Migrant only	6.9	10.3
R	RAP only	38.8	60.1
B	Bilingual only	16.8	59.6
L	Learning Disabled only	36.0	54.1
H	Handicapped only	43.3	55.1
CM	Chapter 1 and Migrant	-	-
CR	Chapter 1 and RAP	30.3	49.7
CS	Chapter 1 and Special Education	34.8	53.7
rB	Reading and Bilingual	17.4	44.0
-- Grade 10 --			
All	All Students	40.1	55.7
No	No Services	40.6	55.8
C	Chapter 1 only	29.9	52.2
M	Migrant only	6.9	17.2
B	Bilingual only	13.1	55.4
L	Learning Disabled only	34.0	54.3
H	Handicapped only	37.1	52.6
CM	Chapter 1 and Migrant	-	-
CS	Chapter 1 and Special Education	-	-
rB	Reading and Bilingual	-	-

Note - Data are not reported for models with less than 10 students.
RAP is not offered at Grade 10.

Source: 1985 Washington State Assessment

FIGURE 36

Learning Resources in the Home

Grade 4 Students

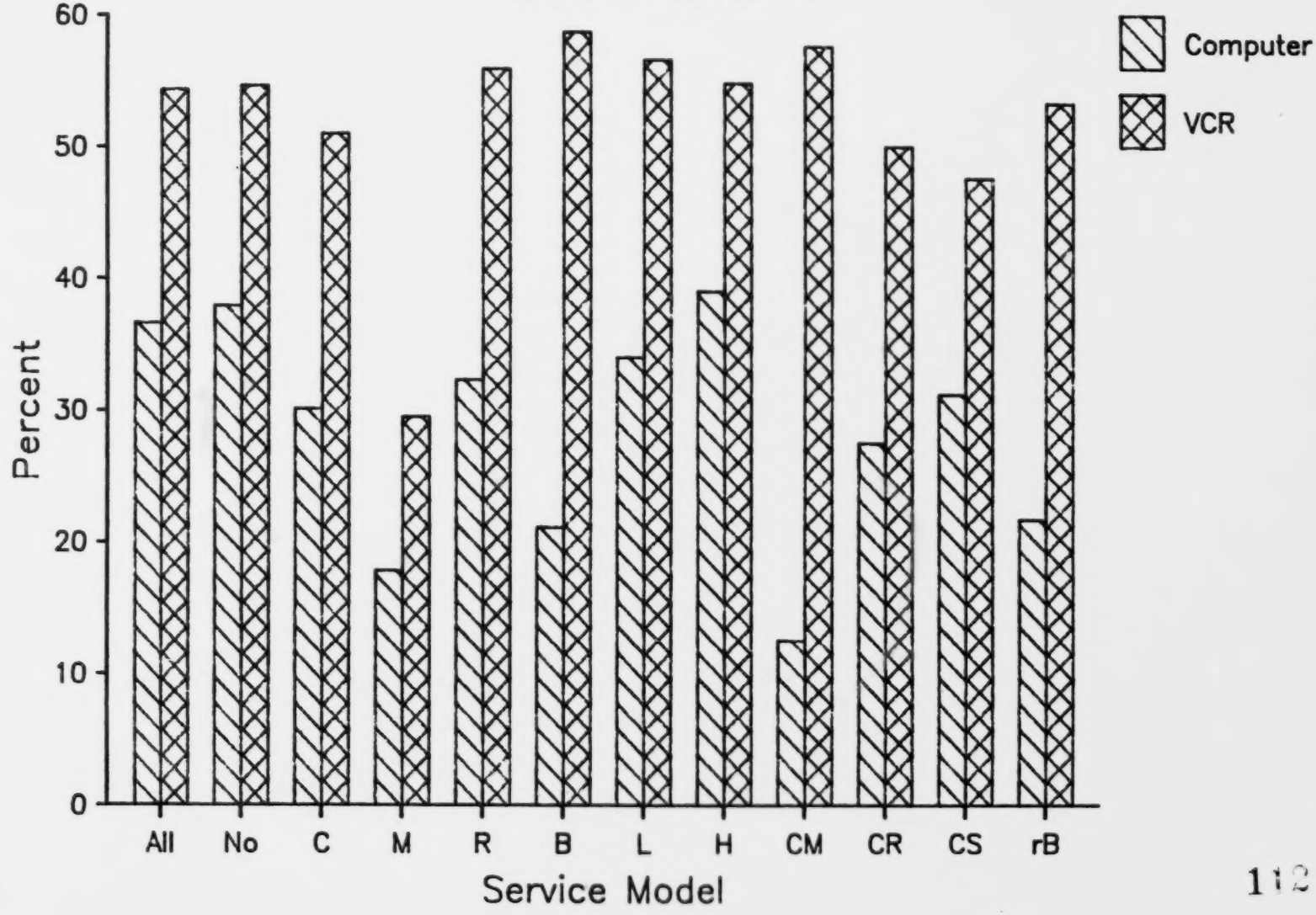


FIGURE 37

Learning Resources in the Home

Grade 8 Students

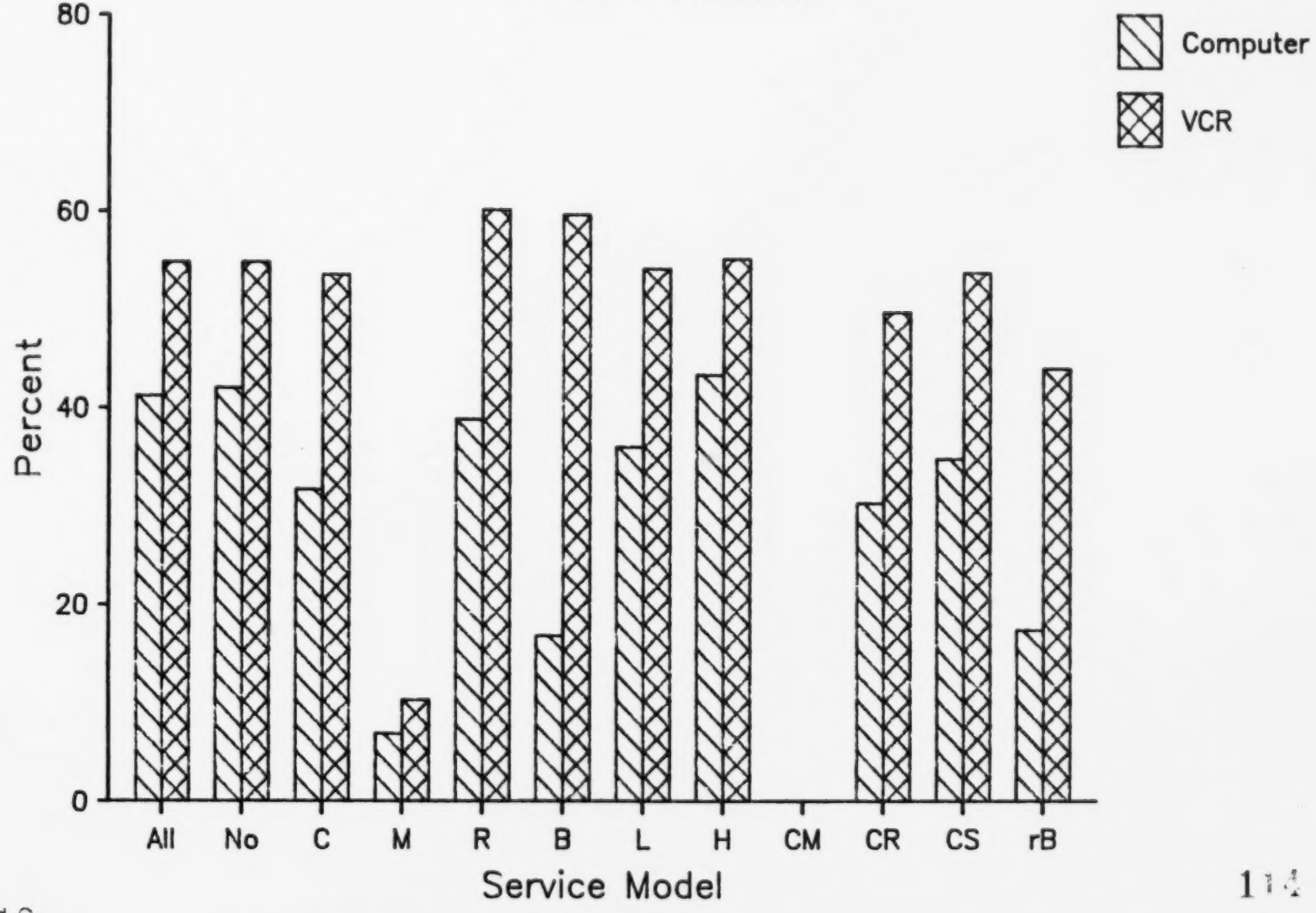


FIGURE 38

Learning Resources in the Home

Grade 10 Students

Approximately 40 percent of the population of students had a microcomputer in their home. The singly-served special programs students were less likely to have a microcomputer at home. The exception to this was the special education student who had the same likelihood of being in a home with a microcomputer as the average student. The percentage of multiply-served children with a home computer ranged from 12 to 31 percent.

Students were also asked if they had a video cassette recorder (VCR) in their home. Over half of all students (55%) were in homes with VCRs. There were only minor differences among the singly- and multiply-served groups. Very few migrant students had access to VCR equipment, however.

Research Question 17. To what extent do children in special programs participate in extracurricular activities?

Eighth- and tenth-grade students were asked about their extracurricular activities. Specifically, the question asked the students' plans to participate in varsity athletics, cheerleading, band, chorus, honorary clubs, hobby clubs, newspaper, student council, committees, youth organizations, vocational organizations, church organizations, junior achievement and community service clubs. The number of planned activities were counted for the singly- and multiply-served students in grades 8 and 10. The planned activities by service model are listed in Table 20 and Figures 39 and 40.

Approximately 13 percent of the average students participate in no extracurricular activities. Thirteen to 24 percent of all special service students report no extracurricular participation for themselves.

At both grade levels, the multiply-served child shows a slightly lesser degree of planned extracurricular activity than the singly-served student. Note that 42 percent of the 335 bilingual students responded that they planned to participate in no extracurricular activities.

Research Question 18. Do the educational expectations of the special program population differ from the average student?

Students in special programs generally predict lower education levels for themselves than do students in the general population. At grade 8, the Chapter 1 Migrant population has the lowest level of expectations; however, at grade 10 the Migrant Program students' expectations are similar to the other special program populations. At grade 10, the multiply-served children see themselves as less likely to finish high school than singly- or non-served students. These data are presented in Table 21 and Figures 41 and 42.

Table 20

School and Community Activities by Service Model

Code	Model	Percent Planning Activities* None	1-2	3-4	>4
-- Grade 8 --					
All	All Students	13.1%	33.6%	40.3%	13.0%
No	No Services	12.7	33.6	40.3	13.4
C	Chapter 1 only	13.2	40.4	36.6	9.8
M	Migrant only	16.1	41.9	29.0	13.0
R	RAP only	13.2	38.2	35.5	13.1
B	Bilingual only	23.9	37.5	31.0	7.6
L	Learning Disabled only	18.0	41.0	31.8	9.2
H	Handicapped only	20.7	35.9	32.1	11.3
CM	Chapter 1 and Migrant				
CR	Chapter 1 and RAP	18.2	37.5	35.8	8.5
CS	Chapter 1 and Special Ed.	20.0	38.7	34.9	6.4
rB	Reading and Bilingual	19.4	38.8	25.9	15.9
-- Grade 10 --					
All	All Students	17.1	38.6	34.7	9.6
No	No Services	16.6	38.3	35.4	9.7
C	Chapter 1 only	17.7	44.4	31.3	6.6
M	Migrant only	15.2	54.5	27.3	3.0
B	Bilingual only	42.2	37.8	14.9	5.1
L	Learning Disabled only	24.7	47.5	22.9	4.9
H	Handicapped only	37.7	40.3	16.7	5.3
CM	Chapter 1 and Migrant				
CS	Chapter 1 and Special Ed.	21.2	36.3	30.3	12.2
rB	Reading and Bilingual				

* Students indicated if they planned to participate in each of 7 school or community activities.

Note - Data are not reported for models with less than 10 students. RAP is not offered at Grade 10.

Source: 1985 Washington Statewide Assessment

FIGURE 39

School and Community Activities

Grade 8 Students

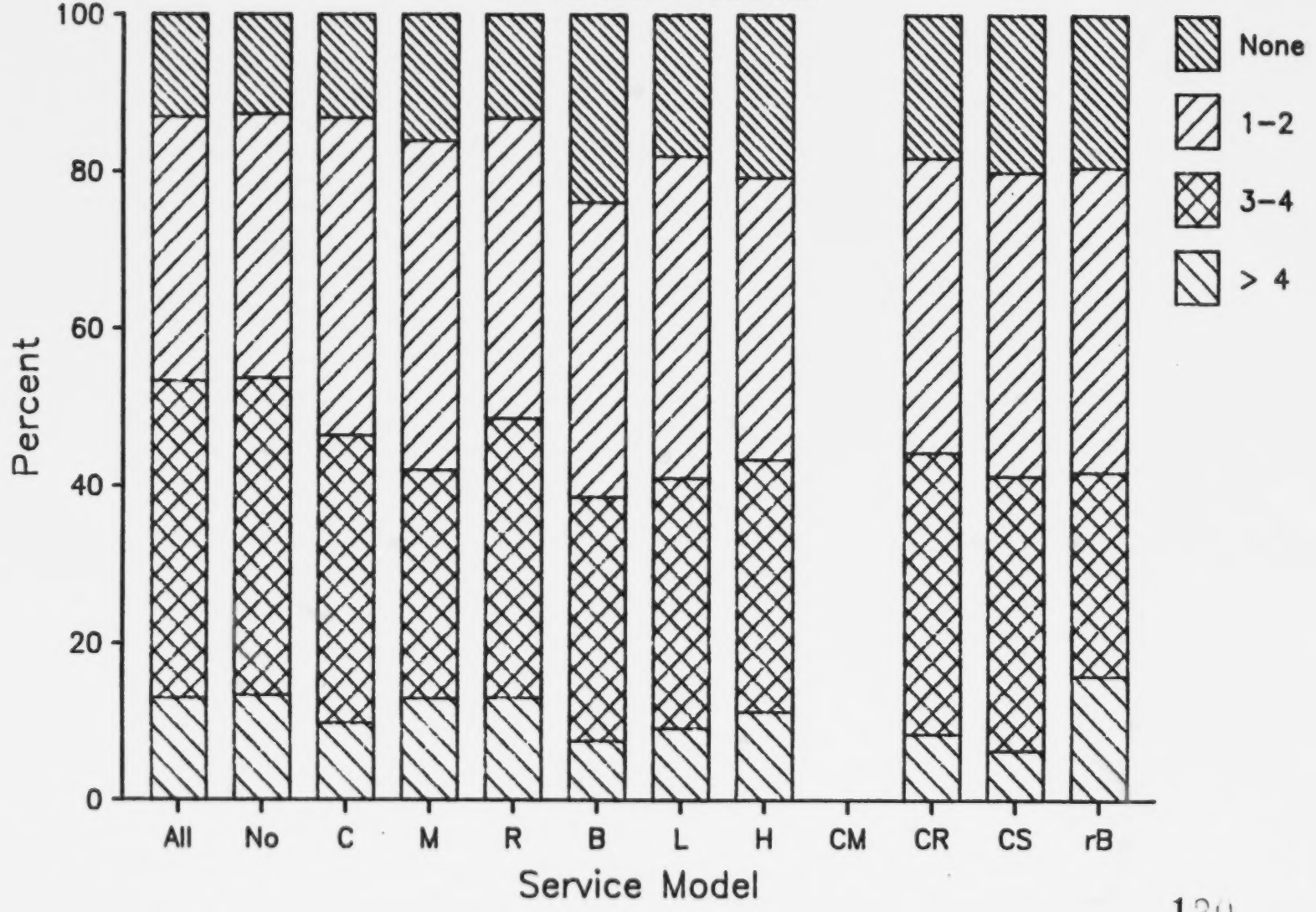


FIGURE 40

School and Community Activities

Grade 10 Students

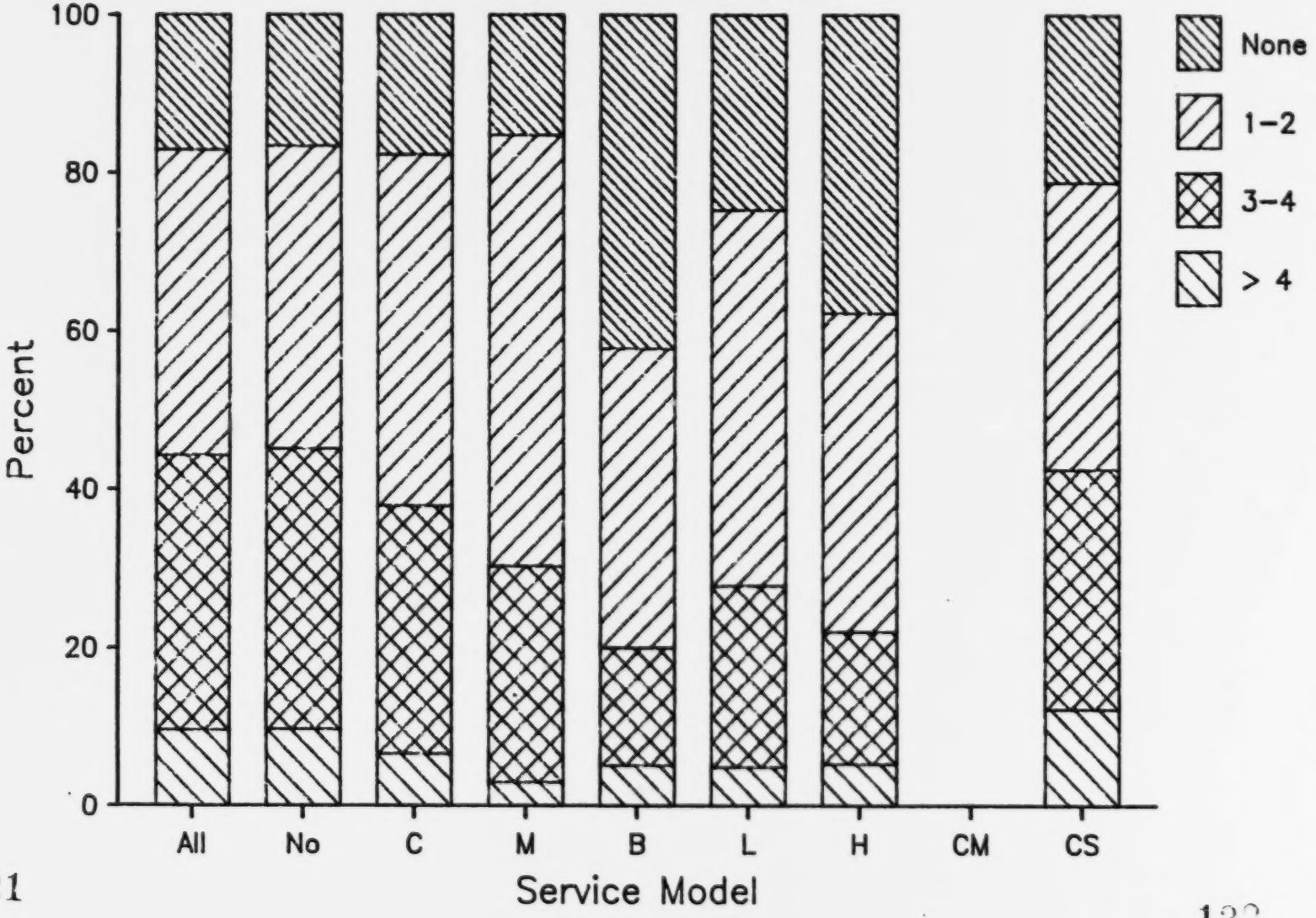


Table 21

Anticipated Schooling by Service Model

Code	Model	Anticipated Schooling				
		< HS	HS	> HS*	BS	> BS
-- Grade 8 --						
All	All Students	.9%	16.6%	30.4%	31.2%	20.9%
No	No Services	.6	14.7	30.2	32.3	22.2
C	Chapter 1 only	2.7	34.3	33.3	21.0	8.7
M	Migrant only	.0	46.2	30.8	15.4	7.6
R	RAP only	2.0	28.0	33.7	25.0	11.3
B	Bilingual only	6.3	21.8	33.9	26.8	11.2
L	Learning Disabled only	3.4	34.2	32.6	20.8	9.0
H	Handicapped only	4.7	40.5	28.0	16.8	10.0
CM	Chapter 1 and Migrant					
CR	Chapter 1 and RAP	5.2	38.7	37.3	9.7	9.1
CS	Chapter 1 and Special Ed.	13.7	31.3	29.8	18.3	6.9
rB	Reading and Bilingual	4.0	32.0	32.0	16.0	16.0
-- Grade 10 --						
All	All Students	.6	15.5	36.3	28.7	18.9
No	No Services	.5	14.1	36.4	29.5	19.5
C	Chapter 1 only	1.5	38.2	40.5	15.4	4.4
M	Migrant only	3.1	37.5	37.5	18.8	3.1
B	Bilingual only	1.9	19.4	38.0	29.8	10.9
L	Learning Disabled only	1.9	46.3	37.0	11.4	3.4
H	Handicapped only	5.2	47.1	32.1	9.7	5.9
CM	Chapter 1 and Migrant					
CS	Chapter 1 and Special Ed.	3.1	46.9	40.6	9.4	.0
rB	Reading and Bilingual					

* Includes Vocational and Trade schools.

Note - Data are not reported for models with less than 10 students. RAP is not offered at Grade 10.

Source: 1985 Washington Statewide Assessment

FIGURE 41

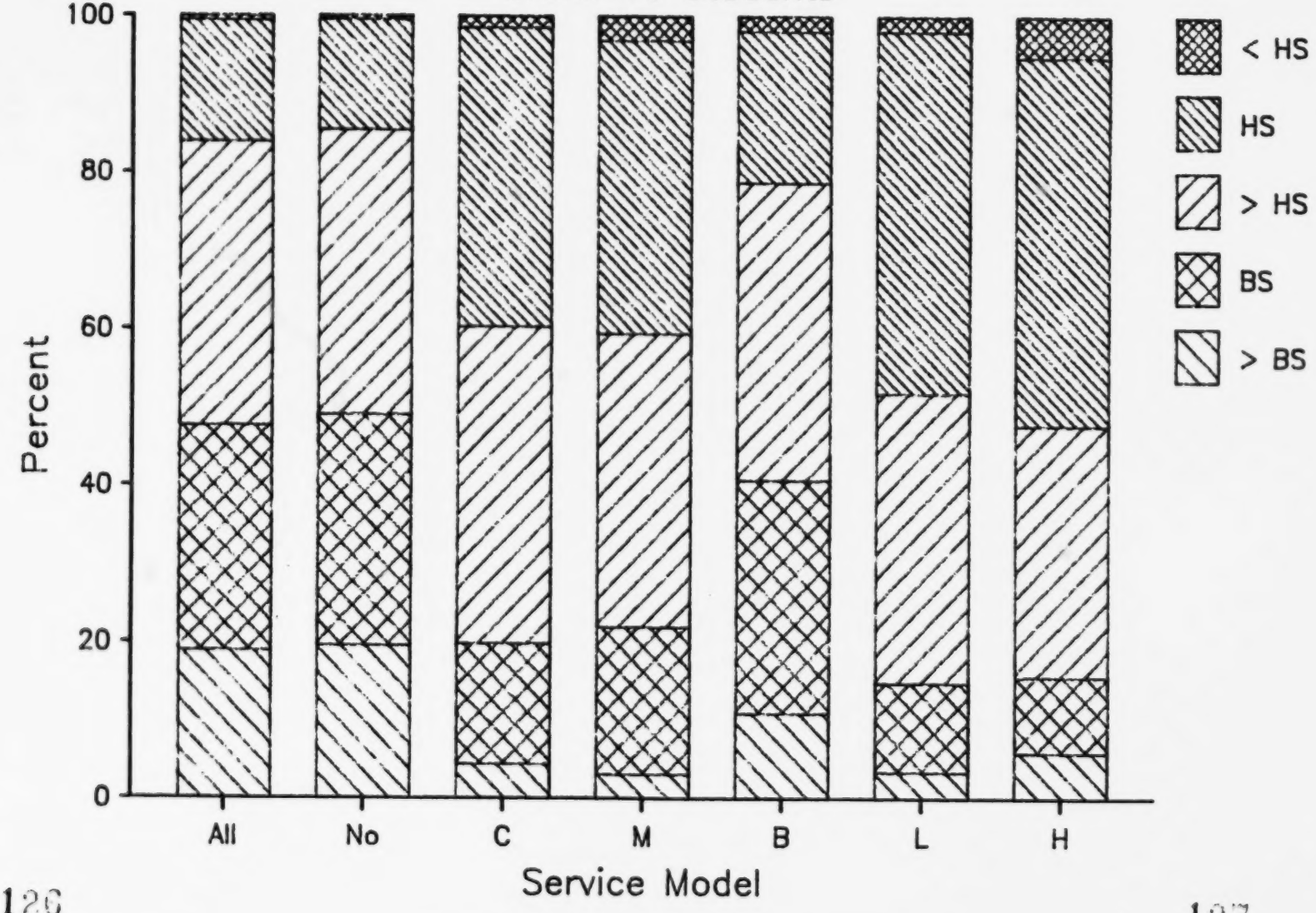
Anticipated Schooling

Grade 8 Students

FIGURE 42

Anticipated Schooling

Grade 10 Students



4.4 Local Patterns of Service Over One Year

The findings reported in Sections 4.1, 4.2 and 4.3 have been drawn from two state level databases: the GRAPES files and the State Assessment Program files. These two databases provide useful but limited information about patterns of compensatory educational services as they were provided during an entire school year. The GRAPES files, for example, can generate reports on the number of students who received services in the Chapter 1 Regular program and the RAP program during the same school year. The GRAPES, however, can not be used to examine individual student movement between programs during the school year or determine whether an individual student received the same or different services in two programs. Even though the State Assessment Program database obtained individual student data, these data are not suitable to track program participation over the school year. To augment these databases and gain a more dynamic view of the participation patterns of students with special needs, the study included case analyses of individual student records from a local school district (Pasco) in Washington State. The results of those school case studies are presented next.

Research Question 19. What are the common models of service delivery within a school year?

The service delivery models for the case studies are described in terms of three major components: program, exit status and temporal relationships. The five programs are Chapter 1 Regular, Migrant, RAP, Bilingual and Special Education. Various subject offerings exist within these programs but are not examined here. The second major component, exit status, refers to student movement in and out of the program or graduation from the program. Of particular interest are Withdrawn, students withdrawn from the school, Exited Early, students graduated from the program but still in the school, and In-Out-In, students who leave the school and the program but later return.

Patterns are defined as Single, Concurrent, Additive or Sequential. Concurrent means that the student is being served by two different programs at the same time. Additive refers to the provision of additional programs without exiting the previous program. Sequential program service describes movement from one program to another; exiting one program and picking up the second program. Records from 16 elementary schools were reviewed to select cases which would represent the various service delivery models and to obtain counts on the different models.

Research Question 20. To what extent do students fit these service models?

Special services to Pasco students in grades 1 through 4 were categorized by program, exit status and temporal relationship. Table 22 summarizes the number and percent of students served in more than one program by different models of service.

Table 22 shows that Pasco Migrant students are more likely to be served by multiple programs than Chapter 1 or RAP students. Of the 415 Migrant students, 240 or 57.8 percent were also served in at least one other program.

Table 22

Number and Percent of Pasco Grade 1-4 Students
By Service Model

	Number of Respondents			Percent of Respondents		
	Chapter 1	Migrant	RAP	Chapter 1	Migrant	RAP
Total Served	705	415	188			
Programs Served in:						
Single	511	175	117	72.5%	42.2%	62.2%
Multiple	194	240	70	27.5	57.8	37.8
Reason Left Program						
Withdrawn	93	91	89	13.2	21.9	47.3
Exited Early	61	26	23	8.7	6.3	12.2
In-Out-In	12	8	8	1.7	1.9	4.3
Pattern of Multiple Service*						
Total Number Also Served in:						
Chapter 1	-	60	30			
Migrant	60	-	16			
RAP	30	16	-			
Bilingual	125	193	33			
Spec Educ	30	38	8			
Concurrent Also Served in:						
Chapter 1	-	38	3	-	63.3	10.0
Migrant	38	-	8	63.3	-	50.0
RAP	3	8	-	10.0	50.0	-
Bilingual	90	171	26	72.0	88.6	78.8
Spec Educ	5	24	2	16.7	63.2	25.0
Additive Also Served in:						
Chapter 1	-	16	4	-	26.7	13.3
Migrant	16	-	7	26.7	-	43.8
RAP	4	7	-	13.3	43.8	-
Bilingual	33	21	7	26.4	10.9	21.2
Spec Educ	8	13	1	26.7	34.2	12.5
Sequential Also Served in:						
Chapter 1	-	6	23	-	10.0	76.7
Migrant	6	-	1	10.0	-	6.3
RAP	23	1	-	76.7	6.3	-
Bilingual	2	1	0	1.6	.5	.0
Spec Educ	17	1	5	56.7	2.6	62.5

* Percents based on the number served in that combination of services

Source: 1985-86 Pasco Records

Table 22 also reveals that relatively few students exited early and even fewer left the program and later returned. Of the 705 students served in Chapter 1 only, 61 or 8.7 percent were exited early. Only 12 or 1.7 percent fit the In-Out-In model. A suprising number of RAP students withdraw from the district during the year.

Table 22 further shows that while many combinations of programs in Pasco are typically concurrent, other combinations are additive or sequential. For example, of the 60 students served in both Chapter 1 and Migrant, 38 (63 percent) of these were concurrent, 16 (27 percent) were additive, and 6 (10 percent) were additive. Combinations with the RAP or Special Education programs, on the other hand, were typically sequential.

Research Question 21. What are the characteristics of students who are served by different models?

A total of 27 students were selected for the case studies. The elementary cases are described in Table 23 and the junior high cases are described in Table 24. The table lists the case number, the service models, the specific pattern of participation and student characteristics. Each of the predominate service models is included in the case studies.

Fourteen of the cases involve the Chapter 1 Program; eleven, the Migrant Program and ten, the RAP Program. Ten of the cases belong to the Single program configuration; six for Chapter 1, one Migrant, and three RAP. Five of these cases are also Exited cases.

Single Program Cases

Three of the Single cases involve the Chapter 1 Program, one, the Migrant Program and one the RAP Program. The first category of cases, Single, involves students who are experiencing moderate academic problems generally in reading with percentiles in the 20s and 30s. Ear infections, the need for glasses, high absence rates and occasional behavior problems are not uncommon in the histories of these students. The program would seem to be providing additional support for these chronically lower achieving students. They are not generally manifesting as serious academic problems as the students being served with multiple programs. For instance, one student (case #E1), not unlike other Single service students, had successfully completed the 2-1 basal reader by the end of second grade and appeared to be making steady progress according to her curriculum-based tests, grades and teachers' comments. The student in the Migrant Program (case #E2) was receiving reading and math through the Migrant Program and appeared to have been in the program in pre-school, first and second grades. This spanish-speaking student was born in Mexico and appeared to be making good progress in school by the end of second grade. Her records indicated that she moved through her reading series successfully and at a reasonable rate (less than one instructional level, 2-1 as contrasted to 2-2, behind). Her current test scores are in the 30th and 40th percentiles.

Table 23

Summary of Elementary Case Studies

Case No.	Service Model	Pattern of Participation	Student Characteristics
E1	Single	Chapter 1 only	Grade 2, white, female
E2	Single	Migrant only	Grade 2, hispanic, female
E3	Exited	Chapter 1 only	Grade 2, white, female
E4	Exited	Chapter 1 only	Grade 2, indian/white, male
E5	Exited	RAP only	Grade 2, black/white, female
E6	Exited	RAP only	Grade 2, white, female
E7	Sequential	Ch 1 to RAP	Grade 6, hispanic, female
E8	Sequential	Ch 1 to RAP	Grade 6, white, female
E9	Sequential	Ch 1 to Spec Educ	Grade 1, white, male
E10	Sequential	Ch 1 to Spec Educ	Grade 1, hispanic, male
E11	Sequential	Ch 1 to Spec Educ	Grade 2, black, male
E12	Additive In-Out-In	Migrant adding Spec Educ Migrant with Spec Educ	Grade 1, white/asian, male
E13	Concurrent	Migrant with Spec Educ	Grade 5, hispanic, female
E14	Concurrent Additive	Migrant with RAP adding Bilingual	Grade 2, hispanic, female
E15	Concurrent	Migrant with Bilingual with Chapter 1	Grade 3, hispanic, female
E16	Concurrent Sequential	Bilingual with (Migrant to Chapter 1 to Migrant)	Grade 6, hispanic, female

Source: 1985-86 Pasco Records

Table 24

Summary of Junior High Case Studies

Case No.	Service Model	Pattern of Participation	Student Characteristics
J1	Single	Chapter 1 only	Grade 7, white, female
J2	Single	Chapter 1 only	Grade 8, white, male
J3	Single	RAP only	Grade 7, hispanic, female
J4	Exited	Chapter 1 only	Grade 7, hispanic, female
J5	Concurrent In-Out-In	Migrant with Bilingual Migrant with Bilingual	Grade 8, hispanic, female
J6	Concurrent In-Out-In	Migrant with RAP Migrant with RAP	Grade 8, hispanic, female
J7	Sequential	RAP to Spec Educ	Grade 7, hispanic, female
J8	Sequential	Spec Educ to Chapter 1	Grade 8, black, female
J9	Concurrent	Migrant with Bilingual with RAP	Grade 8, hispanic, female
J10	Concurrent	Migrant with Bilingual with Spec Educ	Grade 7, hispanic, male
J11	Concurrent Sequential	Migrant with (RAP to Spec Educ)	Grade 7, hispanic, male

Source: 1985-86 Pasco Records

Exit Early Cases

The Exit Early cases contain histories of students who have been slightly behind their classmates, have had higher test scores in the past and have current test scores near the 40th to 50th percentiles. Some of these students such as case #E5 have had attendance and behavior problems, have needed glasses (case #E4), and have moved around. The primary differences between these exited students and the Single program students not exited are that they achieve at higher levels at the outset and demonstrating solid achievement upon exiting the program.

In-Out-In Cases

Four cases describe various combinations of entering and leaving the programs due to the student moving; the In-Out-In configuration. These cases are J5, J6, J9, E12.

All of these students are Migrant. Two are designated as Migrant Status 1, and one is Status 3, and the fourth has both designations of Status 3 and 1 present in his records. Three of the students are Hispanic and one is white. The primary problem encountered by these students seems related to the almost constant disruption of the education process. The students seem to be picked up by the Migrant and Bilingual Programs quite readily as they appear within a school. Other programmatic options or additions, such as Chapter 1 and RAP, appear to be provided based on what is available at the time the student enters the system. The MSRTS and other recording systems, such as Special Education files, seem to aid the district staff in keeping track of the students and their needs. For example, one of the Migrant/Special Education students (Case #E12) with a particularly complex pattern of services appeared to have been followed very well in spite of a number of moves. The Migrant Program staff picked up on school concerns regarding possible neurological deficits. The student was identified very early as having difficulty. Service was provided and progress monitored in the least restrictive settings prior to being placed into Special Education. These programs also appeared to have worked closely with the regular classroom teachers to provide this student with a well-articulated program. This student has, in essence, been retained twice, has been making progress but is still experiencing serious academic difficulties. It may be that Pasco is better than other districts at using their records and tracking these students.

Seventeen cases involve Multiple programs; eight for the Chapter 1 Program, ten Migrant, and seven RAP. An In-Out-In configuration exists in four of the Multiple cases; all of them are Migrant, and two are also RAP. The types of multiple program configurations have been identified as Concurrent, Additive, and Sequential.

Concurrent Cases

Ten cases contain at least one Concurrent combination. These cases are E12 - J16, J5 - J6, and J9 - J11.

Additive Cases

Only two cases contain an Additive pattern; both of these are migrant combinations. The first (case #E12) is a student served by the Migrant program, with Special Education services added two weeks later. It is clear from the records that the addition of the Special Education services was tied to the needs of the student rather than an organizational or programmatic delay. The second case (case #E14) is a Migrant/RAP concurrent combination, with the addition of Bilingual services three months later.

Sequential Cases

Nine cases involve a Sequential pattern, in other words, movement from one program to another. These include E7 - E11, J7 - J8, J11, and J16.

The final category demonstrates the utilization of service options in response to more extensive diagnosis of student needs. Six cases fall into this category. Three cases were in the Chapter 1 program, exited the program and entered the Special Education program. One of the cases (case #J11) within this category was a Migrant/RAP Concurrent combination who dropped RAP and entered Special Education maintaining Migrant services throughout. Case J11 then moved out of the district. Case J8 began as a Special Education student, then moved sequentially into the Chapter 1 Program.

Both of the Chapter 1/RAP sequential students are sixth-graders who switched programs during the same month. The programs are likely to be functionally the same, and the designation of one or the other may be a system issue rather than a student or program issue. One of these students (case #E7) had clearly been struggling with school from the first day she walked into a school building. The other student (case #E9) had been absent a great deal but appeared to be capable, achieving (at least in terms of test scores) but not attending and producing consistently enough to avoid holes in her academic development. The program is probably helping to plug the holes created by her minimal effort and poor attendance, whereas the previous student needs the program just to maintain minimal progress.

In summary, the case studies uncovered several findings related to the singly- and multiply-served child that reinforced and expanded upon the statistical analyses.

These findings were:

- Students served by one special program appeared to be experiencing only moderate academic difficulties -- one to two semesters behind their peers.
- Adding services appeared to provide the additional support needed to maintain steady progress.
- Dropping services was used to gradually move the student back into a full time regular classroom setting.
- Evidence of behavioral problems was present in the records of the singly and multiply-served child.

- The primary problems of mobile students related to the almost constant disruption of their educational experiences.

- Multiple services were generally provided for students with serious problems (academic, behavioral, linguistical, neurological, etc.).

- The compensatory/Special Education combinations were generally sequential with the compensatory program appearing to be the first line of service to address student needs.

SECTION 5: SUMMARY OF FINDINGS

The central purpose of this study was to describe the extent to which ECIA Chapter 1 program students were also served by other categorical programs. Two related objectives were also fulfilled. The study described the achievement levels of students served in one or more programs. The characteristics and school experiences of these children also were examined. These tasks were accomplished through an analysis of existing records, specifically two large state education agency databases.

The state GRAPES files contained cumulative data undifferentiated by grade or subject. The state assessment files contained data collected in October 1985 for three grades. Because of these limitations, questions regarding changes in program placement, especially for the mobile student, could not be addressed with the state databases.

To augment those data, the investigation included a third component - a review of one school district's compensatory education records. What resulted was the identification of the variables helpful in describing multiple program participation and, through the review of student records, a listing of factors that may have influenced these local placement decisions.

This report closes with a summary of the findings detailed in earlier sections of this final report of "A Study of the Categorical Program Participation of Chapter 1 Students."

Categorical Program Services

The extent to which categorical program services overlap varies according to the scope and level of the examination.

- Limited numbers of Chapter 1 Regular students receive more than one compensatory education service. Less than two percent were served by Chapter 1 Migrant. Five percent of Chapter 1 students also received special education. The most frequent combination of programs is federal Chapter 1 and State Remediation Assistance Program; 8.5 percent of Chapter 1 served students are also served by the RAP program in the course of one school year.

- Children served in two programs are usually served in two different subjects.

- Chapter 1 Migrant students are more likely served by more than one program than Chapter 1 Regular students.

- Students in the Bilingual program that also received other services, nearly always received them in reading.

- Almost 10 percent of the students served in ECIA Chapter 1 Migrant are also served in RAP.

- The ECIA Chapter 1 Migrant student has a slightly greater likelihood of qualifying for special education services than do students in Chapter 1 Regular or RAP.

- While about 2 percent of the Chapter 1 Regular students receive Bilingual services, 35 percent of the Chapter 1 Migrant students receive Bilingual services.

- At the district level, the majority of local education agencies (LEAs) indicate some students are served in more than one program in the course of one year. For example, 62 percent of the state's Chapter 1 school districts have a least one or more students who, in the course of a year, also receive RAP service. This indicates that program coordination efforts are a necessity for almost all school districts even though the number and percent of students receiving more than one service is limited.

Student Achievement

- In general, multiply-served students scored lower in reading and math than the student served in only one program.

- There is a dramatic decrease in special program services in grades 8 and 10. Test scores at those grades, however, show that students have no less of a need for special services.

- Special program students, especially migrant children, perceive a greater need for help in reading and math than the unserved student.

- Among those groups receiving multiple services, the students served in Chapter 1 and in special education clearly scored lower in reading and math than did the students served only in Chapter 1.

- Special program students predict lower education levels for themselves than do students in the general population.

Student Characteristsics

- Students served in categorical programs are older and more likely male than students not served. Multiply-served students tend to be older than singly-served students.

- Hispanics dominate the Chapter 1 Migrant population and Asians dominate the Bilingual population. At grade 4, the percentage of blacks served in Chapter 1 is nearly two and one-half times the percentage of blacks in the total population. At grade 10, however, the percentage of blacks in Chapter 1 is less than the percentage in the total population. The percentage of Native Americans served in Chapter 1 at grade 10 is about two and one-half times greater than the percent in the general population.

- Generally, self-reported absentee rates among special program students do not differ from the general population. Bilingual program students reported generally lower absentee rates than other programs or the general population. The grade 10, Chapter 1 Migrant students reported higher absentee rates than did other groups.

- Special program students are less likely to have had preschool experiences than the general population.

- Bilingual and Migrant program students report lower involvement in both preschool and day care.

- Special program students are older than the unserved population in the same grade.

- Special program students are more likely to be boys than girls. The exception to this is within the migrant student population where, in grades 8 and 10, students are more likely to be girls.

- Special program students have less access to learning tools such as microcomputers in the home. The exception to this is the special education student who reports a higher than average access at grades 4 and 8.

- A special program students' access to a VCR is comparable to the average student -- approximately 55 percent. The exception to this is the migrant education student group that has a much lower reported percentage, 29 percent at grade 4, 10 percent at grade 8.

Patterns of Multiple Service

- Three important factors in describing multiple services are:

  Subject: Local resources or program decisions may result in two subjects offered in one special program, the same subject offered in two different programs, or a different subject offered in each special program.

  Exit status: A student moves, drops out for a time, migrates or meets a program's exit criteria, and receives a different service on return to school.

  Temporal relationship: Entry and exit dates reveal that services can be single, concurrent, sequential or additive.

- Students served by one special program appear to be experiencing only moderate academic difficulties -- one or two semesters behind their peers.

- Evidence of behavioral problems were present in the records of both the singly- and multiply-served child.

- The multiple services were generally reserved for the most seriously troubled student who exhibited academic, behavioral, linguistic, neurological and emotional problems.

- The compensatory/Special Education combinations were generally sequential with the compensatory program appearing to be the first line of service to address student needs.

APPENDIX A

ESD - CO - DIST

___ - ___ - ___

ECIA Chapter 1 Regular

SECTION II - COMPREHENSIVE SERVICES REPORT

This section reports unduplicated counts of Chapter 1 Regular students served who received additional compensatory services from sources other than Chapter 1 Regular during the time period of July 1, 1984, through June 30, 1985.

1. Enter the total number of students served by Chapter 1 Regular unduplicated count. (Obtain this figure from Page 1 of this report) . . . . . [ ]*

2. Of the students reported on line 1, enter the number of students who also were served by **Chapter 1, Migrant** programs . . . . . ____

3. Of the students reported on line 1, enter the number of students who also were served by the **state remediation assistance program** . . . . . ____

4. Of the students reported on line 1, enter the number of students who also were served in **special education** programs funded by any fund source . . . . . ____

5. Of the students reported on line 1, enter the number of students who also were served by **state bilingual education** programs . . . . . ____

*NOTE: None of the totals entered on lines 2, 3, 4, and 5 may exceed the total reported in the box on line 1.

-99-

SECTION III - PROGRAM STAFF

Enter the figures representing the total full-time equivalents (FTEs) and the number of persons employed in all school district Chapter 1 programs during the time period of July 1, 1984, through June 30, 1985.

	(1) Chapter 1 Program Funded FTEs	(2) Non-Chapter 1 Program Funded FTEs	(3) Number of Persons
1. Administrators			
2. Teachers			
3. Counselors/Support Specialists			
4. Curriculum Specialists/Coordinators			
5. Teacher Aides/Tutors			
6. Secretaries/Clerks			
7. Others (list)			

ESD - CO - DIST

___ - ___ - ___

ECIA Chapter 1 Migrant

SECTION II - COMPREHENSIVE SERVICES REPORT

This section reports unduplicated counts of ECIA Chapter 1 Migrant served students who received additional compensatory services from funding sources other than Chapter 1 Migrant during the time period of July 1, 1984, through June 30, 1985.

1. Enter the total number of students served by ECIA Chapter 1 Migrant **instructional** programs unduplicated count. (Obtain this number from Page 2 of this report.) . . . . . [ ]

2. Of the students on line 1, enter the number of students who also were served by **state remediation assistance** programs . . . . . _____

3. Of the students listed on line 1, enter the number of students who also were served in **special education** programs funded by any source . . . . . _____

4. Of the students listed on line 1, enter the number of students who also were served by **state bilingual education** programs . . . . . _____

*NOTE: None of the totals entered on lines 2, 3, and 4 may exceed the total reported in the box on line 1.

ESD - CO - DIST

___ - ___ - ___

Remediation Assistance Program

SECTION II - COMPREHENSIVE SERVICES

This section reports the **unduplicated counts** of RAP students who received additional non-RAP compensatory services during the time period July 1, 1984, through June 30, 1985.

1. Enter the total unduplicated number of students served by the district Remediation Assistance Program (Obtain this figure from Page 2 of this report) . . . . . [ ]

2. Of the students reported on line 1, enter the number who also received district physical, occupational, or communications disorder special education services . . . . . _____*

3. Of the students reported on line 1, enter the number who were also served in a state bilingual education program . . . . _____*

*NOTE: Neither total entered on line 2 or 3 may exceed the total reported in the box on line 1.

SECTION III - PROGRAM STAFF

Enter the figures representing the total full-time equivalents (FTEs) and number of persons employed in all school district RAP programs during the time period of July 1, 1984, through June 30, 1985.

Staff Classification	(1) Number of Persons	(2) RAP Funded FTE	(3) Non-RAP Funded FTE
(1) Administrators			
(2) Teachers			
(3) Counselors/Support Specialists			
(4) Curriculum Specialists/Coordinators			
(5) Teacher Aides/Tutors			
(6) Secretaries/Clerks			
(7) Others (list)			

145

146

APPENDIX B

SPI

STATE OF WASHINGTON

Grade 4 Student Questionnaire

WASHINGTON STATEWIDE ASSESSMENT

4 GRADE

STUDENT NUMBER

BIRTH DATE

MONTH: Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

DAY

YEAR: 19–

SPECIAL USE ONLY

FIRST NAME

MI

LAST NAME

USE NO. 2 PENCIL ONLY

STUDENT NAME | SEX | GRADE

TEACHER | BIRTH DATE

SCHOOL | ROOM NO.

DISTRICT | TODAY'S DATE

CITY, STATE

Published by The Psychological Corporation, Cleveland, Ohio

1. Which are you? (Mark one)

- ○ Boy
- ○ Girl

2. Did you go to any of these?
(Mark one for each line)

	Yes	No	I Don't Know
Kindergarten	○	○	○
Day Care	○	○	○
Pre-school or Nursery School	○	○	○
Head Start	○	○	○

3. In what grade were you when you first enrolled in this school district?
(Mark only one)

- ○ Kindergarten
- ○ 1st grade
- ○ 2nd grade
- ○ 3rd grade
- ○ 4th grade

4. Thinking about school since you started first grade, about how often are you absent from school?
(Mark only one)

- ○ Never absent
- ○ Less than 5 days a year
- ○ 5 to 10 days a year
- ○ 11 to 20 days a year
- ○ 21 to 30 days a year
- ○ More than 30 days a year

5. What kind of a reader do you think you are?
(Mark only one)

- ○ A poor reader
- ○ A good reader
- ○ A very good reader

6. Do you think you need more help in reading?
(Mark one)

- ○ Yes
- ○ No

7. What kind of a math student do you think you are?
(Mark only one)

- ○ A poor math student
- ○ A good math student
- ○ A very good math student

8. Do you think you need more help in math?
(Mark one)

- ○ Yes
- ○ No

9. Do you have any of these in your home?
(Mark one for each line)

	Yes	No	I Don't Know
Computer	○	○	○
Cable TV	○	○	○
Video tape recorder (VCR)	○	○	○

10. How often do you read each of the following things at home or in school?
(Mark one for each line)

	Almost every day	Once or twice a week	Once or twice a month	A few times a year	Hardly ever or never
A story in a book	○	○	○	○	○
A poem	○	○	○	○	○
A play	○	○	○	○	○
A newspaper	○	○	○	○	○
A magazine	○	○	○	○	○
A sports book	○	○	○	○	○
The words of a song	○	○	○	○	○
Recipes or directions for making things	○	○	○	○	○

STOP! Student: Please do not mark below this line.

Program Service Codes:

	Yes	No
1. Hand.	○	○
2. L.D.	○	○
3. Bil.	○	○
4. Ch. 1 Reg.		
Read.	○	○
Math.	○	○
Lang.	○	○
5. Ch. 1 Mig.		
Read.	○	○
Math.	○	○
Lang.	○	○
Oral.	○	○
6. RAP		
Read.	○	○
Math.	○	○
Lang.	○	○
7. Hi. Cap.	○	○

	Code in one
8. AI or AN	○
A or PI	○
BI	○
His	○
Wh	○

DO NOT WRITE IN THIS SPACE

NCS Trans-Optic E21777:321

STUDENT NAME | SEX | GRADE

TEACHER | BIRTH DATE

SCHOOL | ROOM NO.

DISTRICT | TODAY'S DATE

CITY, STATE

STUDENT NUMBER

USE NO. 2 PENCIL ONLY

LAST NAME | FIRST NAME | MI

BIRTH DATE

MONTH	DAY	YEAR
Jan	01	19–
Feb	02	
Mar	03	
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		

SPECIAL USE ONLY

Grade 8 Student Interest Questionnaire

OSPI

WASHINGTON STATE WIDE ASSESSMENT

8 GRADE

Published by The Psychological Corporation, Cleveland, Ohio

S-828084

-195-

1. Which are you? (Mark one)

- ○ Male
- ○ Female

2. Which one of the following are you? (Mark only one. If more than one, please mark the one you consider the most important.)

- ○ American Indian or Alaskan Native
- ○ Asian or Pacific Islander
- ○ Black
- ○ Hispanic
- ○ White

3. In what grade were you when you first enrolled in this school district? (Mark only one)

- ○ 8th grade
- ○ 7th grade
- ○ 6th grade
- ○ 5th grade
- ○ 4th grade or below

4. Did you go to any of these? (Mark one for each line)

	Yes	No	I Don't Know
Kindergarten	○	○	○
Day Care	○	○	○
Nursery School/Pre-school	○	○	○
Head Start	○	○	○

5. Do you have any of these in your home? (Mark one for each line)

	Yes	No
A computer	○	○
Cable TV	○	○
A video tape recorder (VCR)	○	○

6. Thinking back over the past several years, about how often are you absent from school? (Mark only one)

- ○ Never absent
- ○ Fewer than 5 days a year
- ○ 5 to 10 days a year
- ○ 11 to 20 days a year
- ○ 21 to 30 days a year
- ○ More than 30 days a year

7. What kind of a reader do you think you are? (Mark only one)

- ○ A poor reader
- ○ A good reader
- ○ A very good reader

8. What kind of math student do you think you are? (Mark only one)

- ○ A poor math student
- ○ A good math student
- ○ A very good math student

9. What kind of a writer do you think you are? (Mark only one)

- ○ A poor writer
- ○ A good writer
- ○ A very good writer

10. How much extra help do you think you may need with any of the following areas in grades 9–12? (Mark one for each line)

	None	Some	A lot
Reading	○	○	○
Writing	○	○	○
Math	○	○	○
Study skills	○	○	○
Educational or vocational/career planning	○	○	○

11. Do you plan to take any of the following courses in grades 9–12? (Mark one for each line)

	Yes	No
General math/pre-algebra	○	○
First-year algebra	○	○
Second-year algebra	○	○
Geometry	○	○
Other advanced math (for example, trigonometry, calculus, math analysis)	○	○
Biology	○	○
Chemistry	○	○
Physics	○	○
Foreign language	○	○
Music (instrumental or chorus)	○	○
Art (including crafts, pottery)	○	○
Business, office, or sales	○	○
Trade and industry courses	○	○
Wood, metal or auto shop	○	○
Technical courses (for example, electronics, drafting)	○	○
Secretarial	○	○

12. Do you plan to participate in any of the following activities either in or out of school during grades 9–12? (Mark one for each line)

	Yes	No
Varsity athletic teams	○	○
Other athletic teams – in or out of school	○	○
Cheerleaders, pep club, majorettes, drill team	○	○
Debating or drama	○	○
Band or orchestra	○	○
Chorus or dance	○	○
Hobby clubs (for example, photography, model building, computer, electronics, crafts)	○	○
Honorary clubs (for example, Beta Club or National Honor Society)	○	○
School newspaper, magazine, yearbook, annual	○	○
School subject-matter clubs (for example, science, history, foreign language, business, art)	○	○
Student council, student government, political club	○	○
School committees (for example, dances, assemblies, special events)	○	○
Vocational education clubs (for example, Future Homemakers, Future Teachers, Future Farmers of America)	○	○
Youth organizations in the community (for example, Scouts, Y)	○	○
Church activities, including youth groups	○	○
Junior achievement	○	○
Community service clubs	○	○

13. What is the <u>one</u> thing that most likely will take the largest share of your time in the year after you leave high school? (Mark only one)

- ○ Working full time
- ○ Entering an apprenticeship or on-the-job training program
- ○ Going into regular military service (Army, Navy, Marines, Air Force, Coast Guard, including attending a military academy)
- ○ Being a full-time homemaker
- ○ Taking courses at a trade, technical, or business school full or part-time
- ○ Taking courses at a school for the performing/visual arts full or part-time
- ○ Taking courses at a community college full or part-time
- ○ Taking courses at a four-year college or university full or part-time
- ○ Working part-time, but <u>not</u> attending a school or college
- ○ Other (travel, taking a break)
- ○ I don't know

14. How much have you talked with the following people about planning your high school program? (Mark one for each line)

	Not At All	Some	A Great Deal
Your father, mother, or guardian	○	○	○
A school counselor	○	○	○
Teachers	○	○	○
Other adult friend or relative	○	○	○
Friends or relatives about your age	○	○	○

15. As things stand now, how far in school do you think you will get? (Mark only one)

- ○ Less than high school graduation (don't plan to graduate)
- ○ High school graduation only
- ○ Less than two years of vocational, trade, or business school after high school
- ○ Two years or more of vocational, trade, or business school after high school
- ○ Less than two years of college
- ○ Two or more years of college, including two-year degree
- ○ Finish college, four- or five-year degree
- ○ Master's degree or equivalent
- ○ Ph.D., M.D., or other advanced professional degree

} Community college, college or university program

STOP! Student: Please do not mark below this line.

Program Service Codes:

1. Hand. ○
2. L.D. ○
3. Bil. ○
4. Ch. 1 Reg.
   - Read. ○
   - Math. ○
   - Lang. ○
5. Ch. 1 Mig.
   - Read. ○
   - Math. ○
   - Lang. ○
   - Oral ○
6. RAP
   - Read. ○
   - Math. ○
   - Lang. ○
7. Hi. Cap. ○

1 2 3 4 5 6 7 8 9 10 11 12 A B C D E

153

Grade 10 Student Interest Questionnaire
WASHINGTON
STATEWIDE ASSESSMENT
10TH GRADE
STUDENT NAME
SEX
GRADE
TEACHER
BIRTH DATE
SCHOOL
ROOM NO.
DISTRICT
TODAY'S DATE
CITY, STATE
STUDENT NUMBER
BIRTH DATE
MONTH
DAY
YEAR
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
SPECIAL USE ONLY
LAST NAME
FIRST NAME
MI
Published by The Psychological Corporation, Cleveland, Ohio

1. Which are you? (Mark one)

- ○ Male
- ○ Female

2. Which one of the following are you? (Mark only one. If more than one, please mark the one you consider the most important.)

- ○ American Indian or Alaskan Native
- ○ Asian or Pacific Islander
- ○ Black
- ○ Hispanic
- ○ White

3. In what grade were you when you first enrolled in this school district? (Mark only one)

- ○ 10th grade
- ○ 9th grade
- ○ 8th grade
- ○ 7th grade
- ○ 6th grade or below

4. Did you go to any of these? (Mark one for each line)

	Yes	No	I Don't Know
Kindergarten	○	○	○
Day Care	○	○	○
Nursery School/Pre-school	○	○	○
Head Start	○	○	○

5. Do you have any of these in your home? (Mark one for each line)

	Yes	No
A computer	○	○
Cable TV	○	○
A video tape recorder (VCR)	○	○

6. Thinking back over the past several years, about how often are you absent from school? (Mark only one)

- ○ Never absent
- ○ Fewer than 5 days a year
- ○ 5 to 10 days a year
- ○ 11 to 20 days a year
- ○ 21 to 30 days a year
- ○ More than 30 days a year

7. Which of the following best describes your grades in the 9th grade? (Mark only one)

- ○ Did not receive letter grades in 9th grade
- ○ Over 3.5 (mostly A's)
- ○ 3.0 to 3.5 (mostly B's, some A's)
- ○ 2.0 to 2.9 (mostly B's and C's)
- ○ 1.0 to 1.9 (mostly C's and D's)
- ○ Under 1.0 (D average or lower)

8. What kind of a reader do you think you are? (Mark only one)

- ○ A poor reader
- ○ A good reader
- ○ A very good reader

9. What kind of a math student do you think you are? (Mark only one)

- ○ A poor math student
- ○ A good math student
- ○ A very good math student

10. What kind of a writer do you think you are? (Mark only one)

- ○ A poor writer
- ○ A good writer
- ○ A very good writer

11. How much extra help do you think you need with any of the following areas? (Mark one for each line)

	None	Some	A lot
Reading	O	O	O
Writing	O	O	O
Math	O	O	O
Study skills	O	O	O
Educational or vocational/career planning	O	O	O

12. Do you plan to take or have you taken any of the following courses in grades 9-12? (Mark one for each line)

	Yes	No
General math/pre-algebra	O	O
First-year algebra	O	O
Second-year algebra	O	O
Geometry	O	O
Other advanced math (for example, trigonometry, calculus, math analysis)	O	O
Biology	O	O
Chemistry	O	O
Physics	O	O
Foreign language	O	O
Music (instrumental or chorus)	O	O
Art (including crafts, pottery)	O	O
Business, office, or sales	O	O
Trade and industry courses	O	O
Wood, metal or auto shop	O	O
Technical courses (for example, electronics, drafting)	O	O
Secretarial	O	O

13. Do you now participate or do you plan to participate in any of the following activities either in or out of school during grades 9-12? (Mark one for each line)

	Yes	No
Varsity athletic teams	O	O
Other athletic teams – in or out of school	O	O
Cheerleaders, pep club, majorettes, drill team	O	O
Debating or drama	O	O
Band or orchestra	O	O
Chorus or dance	O	O
Hobby clubs (for example, photography, model building, computer, electronics, crafts)	O	O
Honorary clubs (for example, Beta Club or National Honor Society)	O	O
School newspaper, magazine, yearbook, annual	O	O
School subject-matter clubs (for example, science, history, foreign language, business, art)	O	O
Student council, student government, political club	O	O
School committees (for example, dances, assemblies, special events)	O	O
Vocational education clubs (for example, Future Homemakers, Future Teachers, Future Farmers of America)	O	O
Youth organizations in the community (for example, Scouts, Y)	O	O
Church activities, including youth groups	O	O
Junior achievement	O	O
Community service clubs	O	O

14. What is the one thing that most likely will take the largest share of your time in the year after you leave high school? (Mark only one)

- ○ Working full time
- ○ Entering an apprenticeship or on-the-job training program
- ○ Going into regular military service (Army, Navy, Marines, Air Force, Coast Guard, including attending a military academy)
- ○ Being a full-time homemaker
- ○ Taking courses at a trade, technical, or business school full or part-time
- ○ Taking courses at a school for the performing/visual arts full or part-time
- ○ Taking courses at a community college full or part-time
- ○ Taking courses at a four-year college or university full or part-time
- ○ Working part-time, but not attending a school or college
- ○ Other (travel, taking a break)
- ○ I don't know

15. How much have you talked with the following people about planning your high school program? (Mark one for each line)

	Not At All	Some	A Great Deal
Your father, mother, or guardian	○	○	○
A school counselor	○	○	○
Teachers	○	○	○
Other adult friend or relative	○	○	○
Friends or relatives about your age	○	○	○

16. As things stand now, how far in school do you think you will get? (Mark only one)

- ○ Less than high school graduation (don't plan to graduate)
- ○ High school graduation only
- ○ Less than two years of vocational, trade, or business school after high school
- ○ Two years or more of vocational, trade, or business school after high school
- ○ Less than two years of college
- ○ Two or more years of college, including two-year degree
- ○ Finish college, four- or five-year degree
- ○ Master's degree or equivalent
- ○ Ph.D., M.D., or other advanced professional degree

} Community college, college or university program

STOP! Student: Please do not mark below this line.

Program Service Codes:

1. Hand. ○
2. L.D. ○
3. Bil. ○
4. Ch. 1 Reg.
   - Read. ○
   - Math. ○
   - Lang. ○
5. Ch. 1 Mig.
   - Read. ○
   - Math. ○
   - Lang. ○
   - Oral ○
6. RAP
   - Read. ○
   - Math. ○
   - Lang. ○
7. Hi. Cap. ○

1 2 3 4 5 6 7 8 9 10 11 12 A B C D E